LUFTWAFFE COLOURS

CLASSIC COLOURS

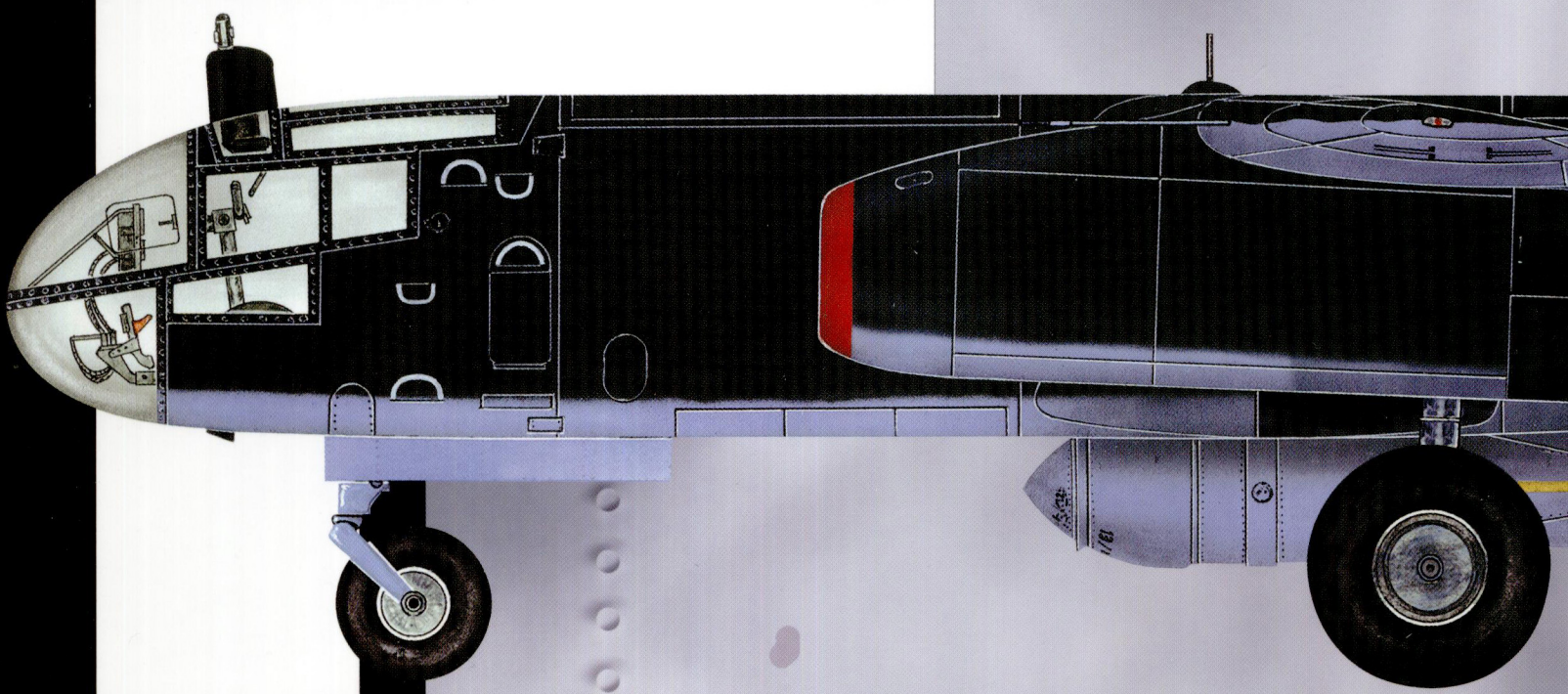
KAMPFFLIEGER

Volume Four

Nick Beale

BOMBERS OF THE LUFTWAFFE

Summer 1943-May 1945



THE LUFTWAFFE BOMBER FORCE 1933-1945

"...so far Peltz has never learned from his mistakes. He seems brave personally, having been a Stuka pilot before the days of Allied air superiority. Since going off ops, the prospect of other men — his crews — facing murderous odds certainly has not caused him to quail. ... He is the ideal leader if rapid wastage of an air force is desired. ... By the time the oil crisis set in, the German long-range bomber force was so ineffective that it was decided not to waste fuel on it, and it is now almost invisible."

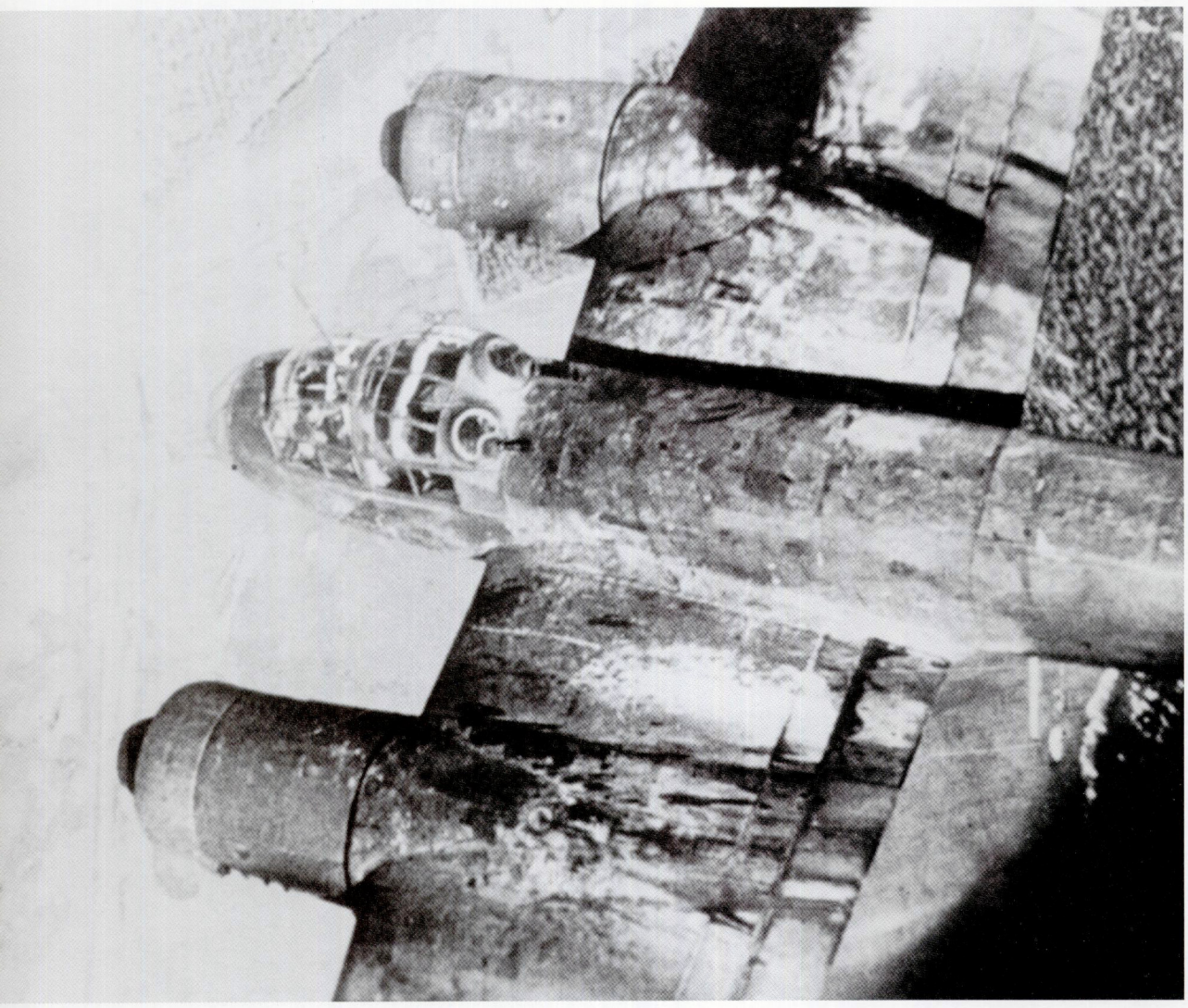
RAF intelligence summary, January 1945

Introduction

In summer 1943, the *Luftwaffe* could still dispatch fleets of bombers across daylight skies to tactical objectives in the Soviet Union but the end of this era was at hand. The bomber force would decline for a variety of reasons: the *Reich* lacked the capacity to build, crew, maintain and fuel its bombers in the West, East and Mediterranean alongside the urgently needed expansion of its fighter and close support arms. The *Kampfgruppen* were little better equipped for the most part than they had been in 1940 and their electronic systems, once so advanced, were now far behind those of the Allies.

Diminishing effectiveness is a recurring theme of this period, occasional successes notwithstanding. The force arrayed against England in early 1944 was superficially impressive but barely able on some nights to find London — the largest urban target in the world — while attrition steadily reduced the number of sorties mounted. In the Mediterranean theatre, successes against convoys were intermittent at best and only rarely was real damage inflicted on ports or airfields. By 1944, jets were the only bombers that could fly by day in the West and survive but even then concentrated bombing was out of the question since formations were vulnerable and aircraft were few. Technical novelties such as guided weapons and composite aircraft could not redress the balance, either.

In the late war period, *Luftwaffe* fighter and night fighter units dropped bombs; bomber *Gruppen* were assigned to home defence and transport duties; everyone did their own weather reconnaissance; single-engined types were becoming the norm. This book addresses that confused picture by dealing almost exclusively with the operations of the *Kampfgeschwader*, whatever missions they were flying. Only one *Kampfgeschwader (Jagd)* is considered, after it reverts to bombing; *Lehrgeschwader* 1 is included because it was a bomber unit in all but name and on account of its prominence in bombing operations in the West.



LEFT:
This extremely weathered Ju 88 A-4 of an unidentified unit, shows the external paint finishes were badly worn by the weather and general continuous operational usage. The base colours were clearly the factory standard finish of 70/71 greens with probably RLM 65 underneath. There is also evidence this machine had at one time been painted with temporary white paint for snowy conditions.

The Eastern Front: Summer 1943

RIGHT: Major Emil Allmendinger (centre), was Gruppenkommandeur of III./KG 53 from 24 June 1943 to 15 March 1945.

Operation Citadel

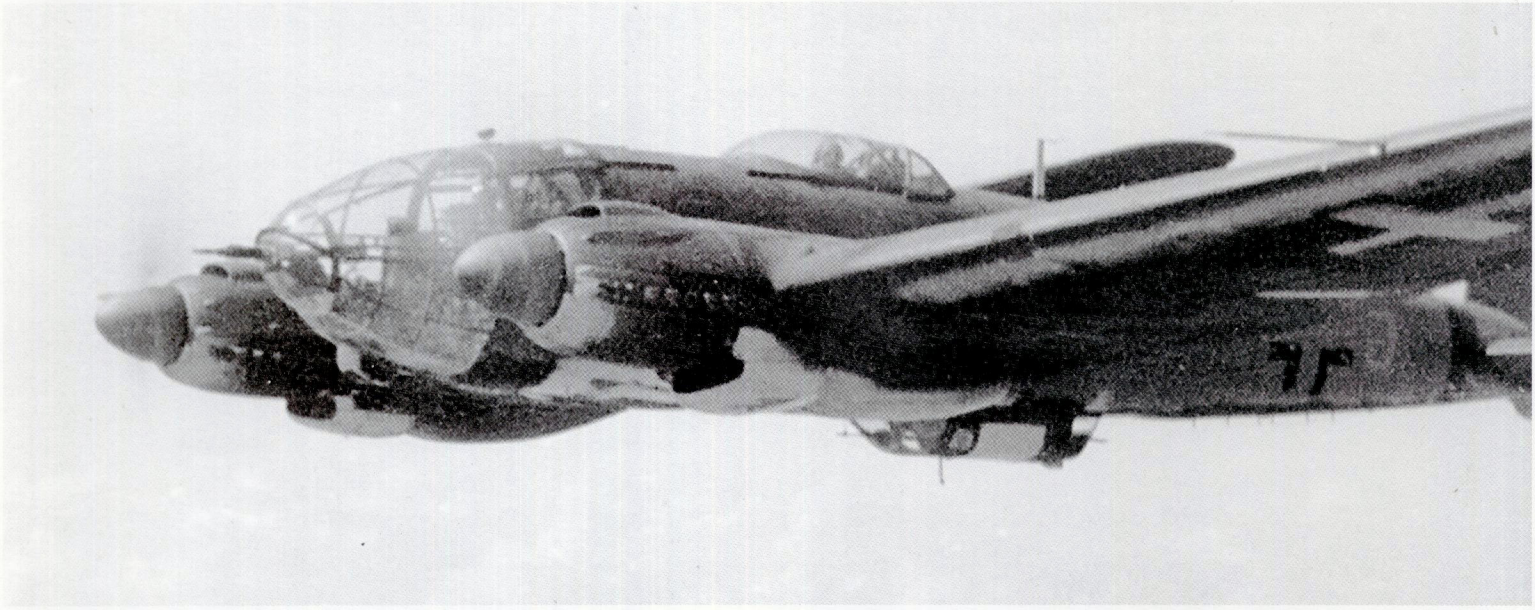
The last great German offensive in the Soviet Union, *Unternehmen Zitadelle* was launched in the early hours of 5 July 1943. The *Kampfflieger* could operate the way their arm had been designed to, in daylight, in support of advancing armies and with few losses. It could have been 1940 all over again and certainly the bombers themselves (the He 111 H-6 and H-11, the Ju 88 A-4 and A-14) were little different from three years earlier.

On the first day, KG 3, KG 27, KG 55 and I./KG 100 (all under *Genmaj.* Hans Seidemann's VIII. *Fliegerkorps*) flew 536 sorties, concentrated in front of II. *SS-Panzerkorps*. Only four He 111s and a Ju 88 were lost in exchange for nine ammunition and fuel dumps claimed destroyed. Two days later, serviceability had sunk so far that close fighter escort was not available for the *Korps*' 498 bomber sorties (178 of them flown by KG 55's Heinkels) but even so, only one He 111 and a Ju 88 were lost. Night bombing was on a far smaller scale (57 aircraft) and directed in part against rail links behind the Soviet front. Next day, the *Luftwaffe* dropped 1,000 tonnes of bombs in support of the German 2. *Armee*.

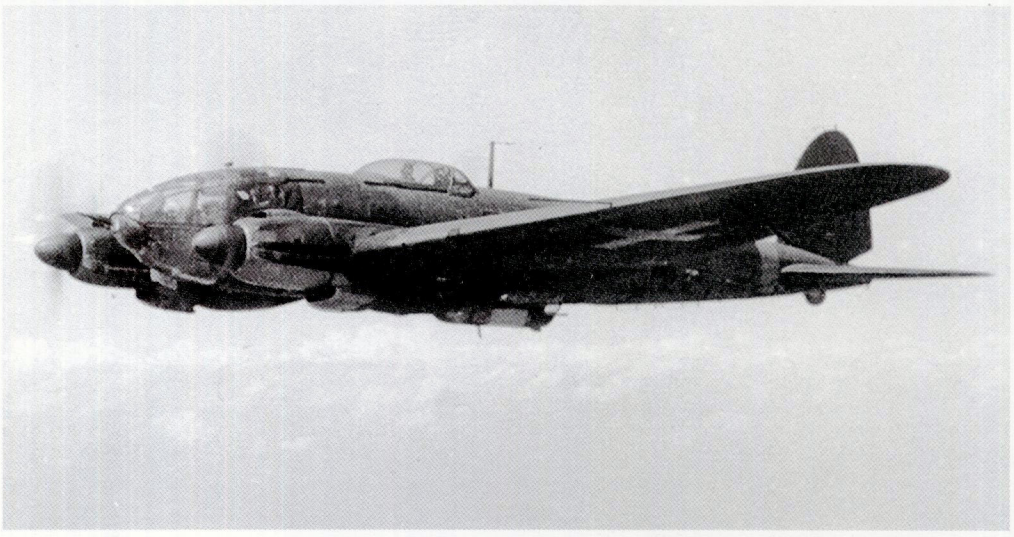
A week into the German assault, the Red Army counterattacked. The *Luftwaffe's* nocturnal flying intensified with 206 sorties dispatched on the night of 16/17 July, 88 of them by II./KG 4. Three quarters of the missions were against traffic and installations in the Ulyanova–Krapivna area, the remainder against railways with returning crews reporting major ammunition explosions, petrol fires and the silencing of numerous AA positions. Attacks on rail targets brought claims of multiple hits on five transport trains and destruction of a locomotive while four large sheds and 10 wagons in sidings were set on fire. Milestones were passed next day when II./KG 53 flew its 10,000th sortie and KG 4 its 30,000th. Targets were troop concentrations, trucks, tanks, artillery and AA. During the night of 18/19 July, *Lt.* Hasselbach of the specialised rail attack *Staffel,* 14. (Eis.)/KG 27 carried out a low-level attack on the station at Jasnaja Poljana, destroying three trains.

LEFT: The Grave of Oblt. Waldemar Teige, a holder of the Ritterkreuz. Teige was a bomber pilot, but served for a time with an ad hoc night fighter unit on the Eastern Front, scoring twelve victories. He went back to bombers with 6./KG 53. He was killed on 3 October 1942 when his He 111 was hit by Russian AA fire. His parachute apparently caught on the tail assembly while bailing out.

Summer 1943-May 1945



ABOVE: He 111 H-11 'A1+FS' of 8./KG 53. Like 'JS' opposite, it carries the 70/71 segmented scheme on its upper surfaces and the remains of black overpainting on its undersides, together with a toned down fuselage cross. An unusual feature is the highly conspicuous white cross under the wing. It also lacks exhaust shrouds. The code letter 'J' is painted red, as are the forward sections of the spinners.

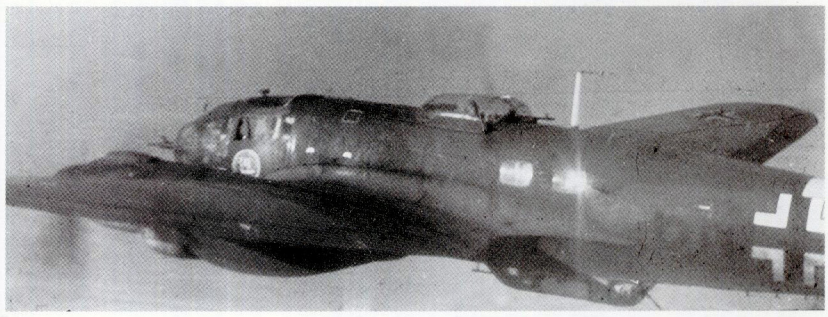


RIGHT: He 111 H-11 'A1+JS' of 8./KG 53 in flight. It has a 2 cm MG FF cannon in the nose position and fore and aft machine guns in the ventral gondola. The fuselage outline cross is toned down with black for night operations, but there are no shrouds on the exhausts. Underwing crosses appear solid white on a temporary black paint scheme which has been largely removed or eroded, with the original pale blue emerging. The yellow Eastern Front fuselage band is blacked-out. If this is an 8. Staffel aircraft, then the 'F' is red.

BELOW: Mechanics at work on an He 111's engine. Note the white segment of the spinner which was a common feature on many Luftwaffe aircraft. The machine's blue 65 undersides have been oversprayed with a meander pattern of black or dark grey.

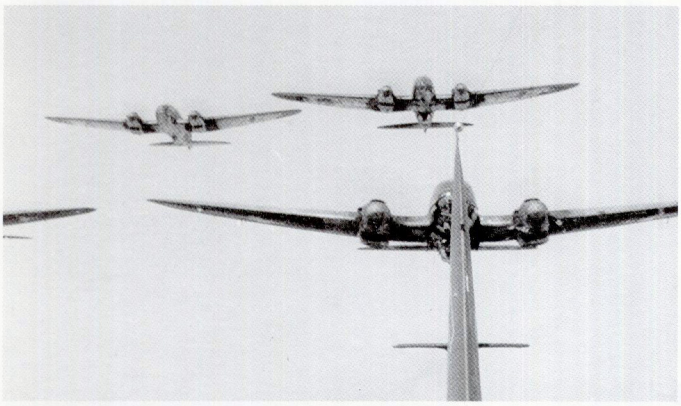
ABOVE: Ground crewmen rolling SC 250 bombs beneath the open bay doors of an He 111 H from 8./KG 53 (note the red spinner tips). The aircraft's undersides are in black 22 and the dark green upper surfaces have been given a heavy mottle of pale blue or grey.

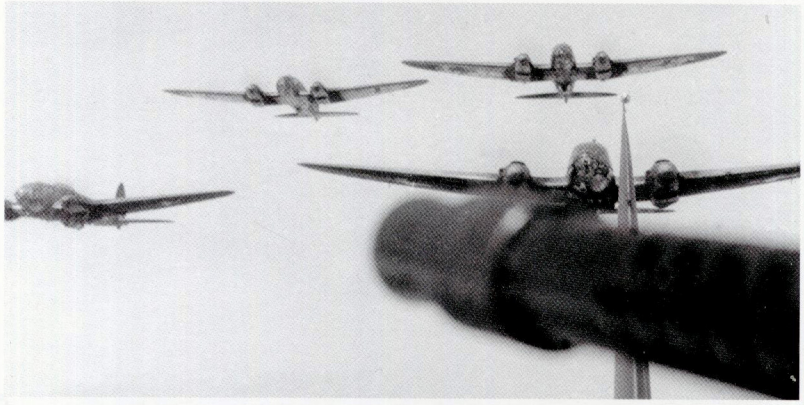
ABOVE, LEFT AND BELOW: During the summer and autumn of 1943, many bomber units were pressed into ferrying supplies along the Eastern Front. Here He 111 H-6s of 1./KG 100 are on such a mission carrying additional supply containers installed on an external bomb rack. The aircraft still carry the standard splinter pattern of 70/71 on the upper surfaces with 65 underneath and the unit code '6N' and Staffel letter 'H' were in black, with the individual aircraft letter in white. Note also the extra wide yellow fuselage band painted around the rear half of the fuselage cross. These aircraft also still carry the 'Viking ship' unit emblem on their noses.



LEFT: Somewhere on the Eastern Front, three officers address a parade with, in the background, six He 111Hs of III./KG 53. The nearest Heinkel is camouflaged with heavy 'clouds' of pale blue or grey over a dark base; the next machine, by contrast has a fine meander running fore and aft, in a dark colour over a light grey base. Undersurfaces are black, late war white outline crosses are carried and spinner tips appear to be either red or yellow.

Summer 1943-May 1945



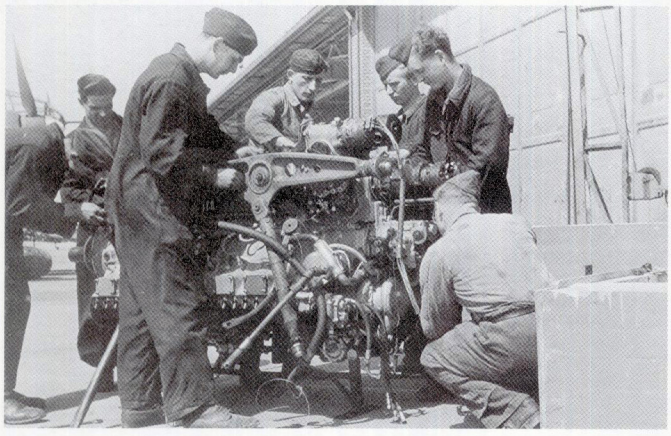


ABOVE AND ABOVE RIGHT: Seen from the dorsal gun position of an He 111, four more Heinkels in formation, in broad daylight. The nearest aircraft has black undersides but the others do not. It also has exhaust shrouds fitted.

On the first day of August, 574 bomber sorties contributed toward the 1,290 tons of bombs dropped by the *Luftwaffe*. The 70 Ju 88s committed by II./KG 3 found what would nowadays be called a target-rich environment. Twenty-five machines made five attacks on an armoured train in the station at Katerinovka, reporting about 10 wagons destroyed and the rest derailed into bomb craters. Four Ju 88s on armed reconnaissance set a fuel store on fire with a direct hit and 11 more attacked a wood; another 14 bombed an ammunition store, two of them being damaged by infantry fire. Kussakovo station was covered by haze however and the 13 Ju 88s on this mission were unable to observe the effects of their bombs.

Next day, the same *Gruppe* was supporting the 2. *Panzer Armee,* claiming 21 Soviet tanks destroyed and 12 damaged as well as the destruction of 88 trucks. Over the succeeding days, railways were a frequent target, especially the station at Lgov. On 5 August, II./KG 3 was transferred from Konotop to Poltava. On the 8th, little over a month after the *Zitadelle* offensive had begun, the situation reports speak of 72 bombers supporting the *defence* of 4. *Armee* while 89 He 111s flew 'army support' missions north east of Karatschev. Targets were vehicles, armour, troops assembly areas and active artillery batteries. On 14 August, KG 27 flew its 40,000th sortie of the war and KG 53 passed the 35,000 mark on the 19th.

RIGHT: This clumsy-looking bomb cradle apparently needs five men to move and steer it. The He 111H at rear has red spinner tips (denoting 8./KG 53) and black undersides and there appears to be a pale mottle sprayed over its upper surfaces. The exhausts are not shrouded.



RIGHT: Seven 'Black Men' (Luftwaffe slang for mechanics) working outside a hangar on an engine. Note the white spinner tips of the He 111 H in background, denoting 7./KG 53.

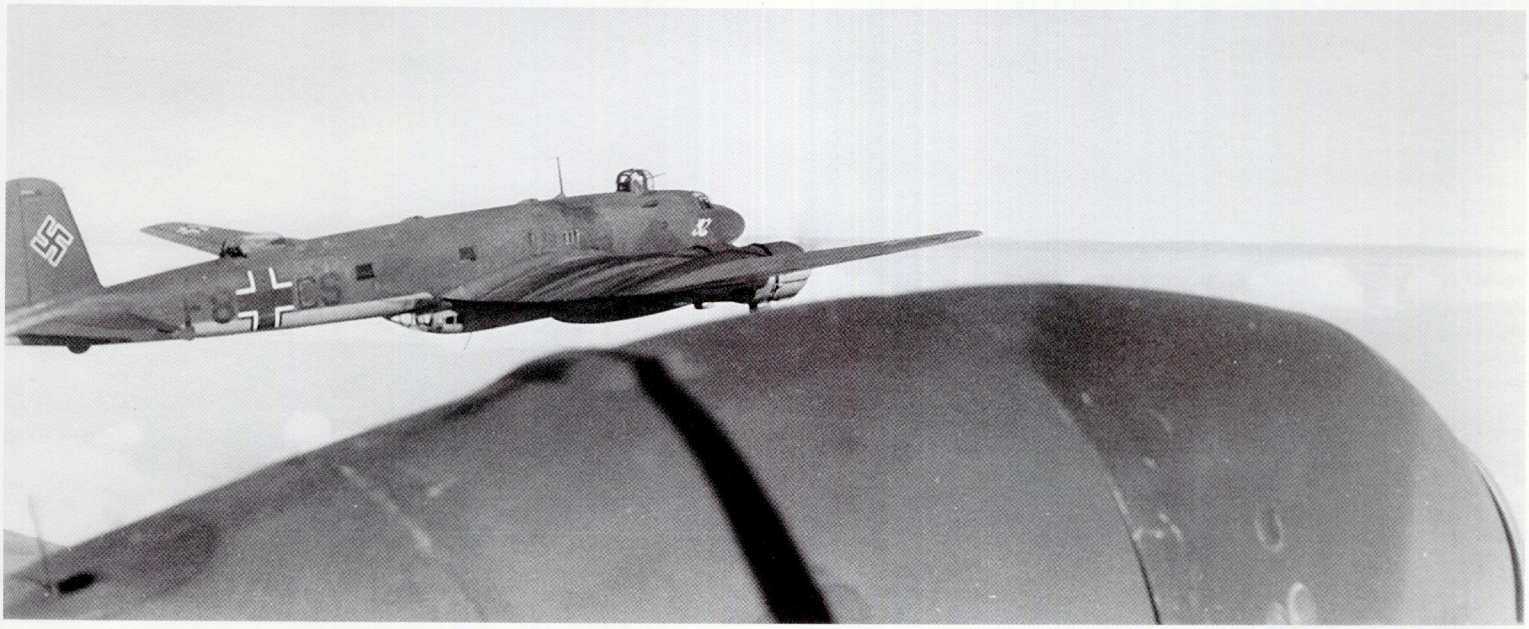
II./KG 3 report on operations for 29 July 1943

33 Ju 88 committed: 4 of these on weather reconnaissance on the front of XIII. and XX. Armeekorps, 2 of which dropped bombs on Lgov station, hits on the tracks. Derjugino occupied by about 25 single-engined aircraft. Very good placement of hits amongst dispersed aircraft: 5 aircraft definitely destroyed, 10 probably damaged.

8 Ju 88: armed reconnaissance in front of XIII. Armeekorps. Attack on dispersed lorries on the eastern outskirts of Sutschkino: one lorry set on fire, further effects not observed. Railway Saudscha–Lgov: several hits scored on a train on the open track, about 10 wagons derailed.

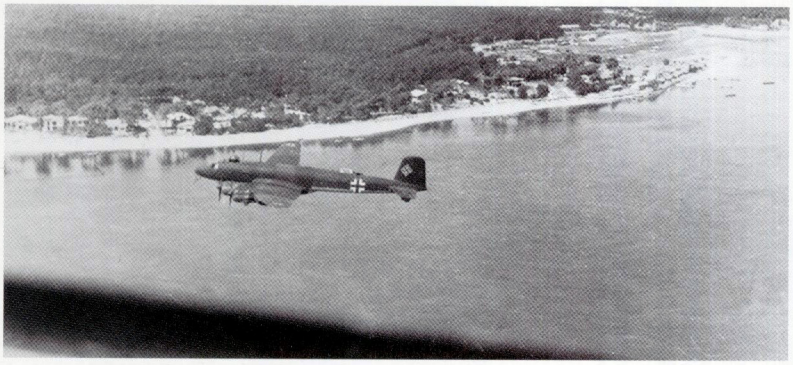
Bombs on 4 fighters taking off from the airfield at Dimitrievskaya: 1 aircraft probably damaged.
Bombs dropped: 25 tonnes.
Defence: repeated attack by 10 fighters; limited *Flak* and ground defence.
Losses: 1 Ju 88 set on fire by fighters. Emergency landing near Seredina-Buda, crew unhurt.

Northwest Europe and the North Atlantic: Summer–Autumn 1943



ABOVE: Coded F8+ES this Fw 200 C-3 belonging to 8./KG 40 heads out over the Atlantic on another long-range mission. Note the aircraft has the unit emblem 'World in a Ring' on the nose.

Persistent, small-scale bombing war was being waged against England (the rest of Britain was untouched) by IX. *Fliegerkorps* from bases in France, Holland, Belgium and Northwest Germany. The *Korps* commander, *Genmaj.* Dietrich Peltz, had the imposing title of *Angriffsführer England* (Attack Leader England). In Western and Southwestern France was X. *Fl.Kps* commanding elements of KG 40 and KG 100 in the maritime attack role over both the Atlantic and the Western Mediterranean, as the occasion demanded. These two *Korps* were subordinated to *Luftflotte* 3 while 2. *Fliegerdivision* in the South of France, was part of *Luftflotte* 2 and solely concerned with the Mediterranean at this stage.



RIGHT: A Fw 200 C-4 from Stab III./KG 40 coded F8+AD heads out on patrol from Bordeaux-Merignac.

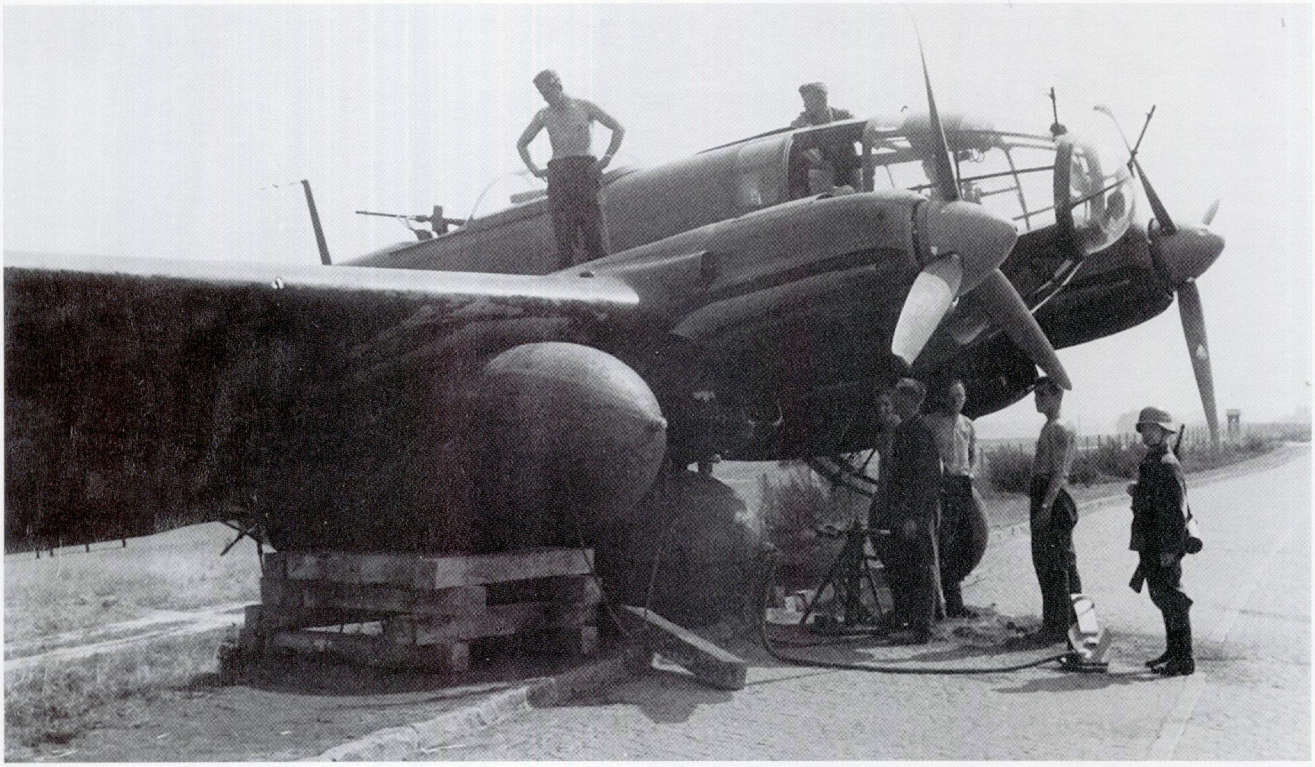
The Bay of Biscay

As detailed in Volume 3 of this series, guided anti-ship weapons entered *Luftwaffe* service during the summer of 1943. This new threat had led to a temporary withdrawal of Allied warships from the Bay, making it a little less dangerous for U-boats on passage to and from their operational areas. He 177 and Do 217 missile operations were switched to the Mediterranean but the veteran Fw 200 C was also adapted as a missile carrier and fitted with FuG 200 *Hohentwiel* 1 search radar. After training over the Baltic, III./KG 40 undertook a small number of missions with the type, beginning in late December 1943.

ABOVE: Two Fw 200 C-3s of 1./KG 40 stand ready for operations at Bordeaux-Merignac. The machine furthest from the camera is coded F8+CH.

1. Named for a fortress on a rock above Singen in Southwest Germany, with a commanding view over the surrounding countryside.

Summer 1943-May 1945



RIGHT: This He 111 H-3, possibly from KG 100, had to make a forced landing after returning from a mission over England, but overshot the airfield and ended up near a French road. The pilot had feathered the engines and landed with the starboard undercarriage still retracted. It appears that only slight damage was done to the propellers and Luftwaffe ground crews are trying to raise the aircraft off the ground using air bags, in order to drop the starboard undercarriage.

The British Isles

The main burden of attacks on England during this period was borne by KG 2, joined by elements of KG 6, I./KG 66 and the Fw 190 *Jabos* of I./SKG 10 (for the operations of the latter, see *Jagdwaffe Vol. 4, Section 1*). Nuisance raids were a staple activity, especially against London and often in conjunction with a main force raid on another target. The harassment operation against the British capital on 9 July by eight Do 217s of KG 2 was unusual in taking place in daylight. The east coast port of Grimsby was raided on the 12/13th and Hull Docks the next night, over 50 fires being started. While this was going on, ten Me 410s of V./KG 2 took up the intruder role and these missions continued for the next three months, bombing airfields and picking off the occasional heavy bomber as a counterpoint Bomber Command's assault on Germany's cities. Meanwhile, British intruders harried the Germans' bases in their turn. When the *Gruppe* tried to attack London on the 15/16th, they lost their *Kommandeur, Hptm.* Friedrich-Wilhelm Methner. The remainder of the month saw harassment of London and Brighton and a mining operation by KG 2 while an attack on Hull was thwarted by thick mist.

From the second week of August, V./KG 2 resumed its operations against RAF bombers as they returned from Germany. The main force raids that month were on Plymouth, Portsmouth (see *Kampfflieger* Vol. 3) and Lincoln. The second of these was flown in two waves, totalling 91 aircraft but brought KG 2 the worst casualties since Dieppe in 1942, ten machines lost or damaged. The Lincoln raid suffered an early setback when the target marker, a Do 217 of 1./KG 66, was shot down. During September, II./KG 6 was deployed to the Aegean, while I./KG 6 and II./KG 2 began converting to the Ju 188. Much of the month's flying was given over to mining of Britain's seaways such as the Thames Estuary and the River Humber. Yet again, London was bombed (sometimes as a diversionary tactic) and the Me 410s maintained their pressure on Bomber Command.

Luftwaffe Bomber Force, 30 September 1943

Stab KG 2	Do 217	*Stab* KG 6	Ju 188	2./KG 40	He 177	I./KG 66	Do 217
I./KG 2	Do 217	I./KG 6	Ju 188	7. & 9./KG 40	Fw 200		
II./KG 2	Do 217	III./KG 6	Ju 188				
V./KG 2	Me 410						

Italy and the Balkans

September–December 1943

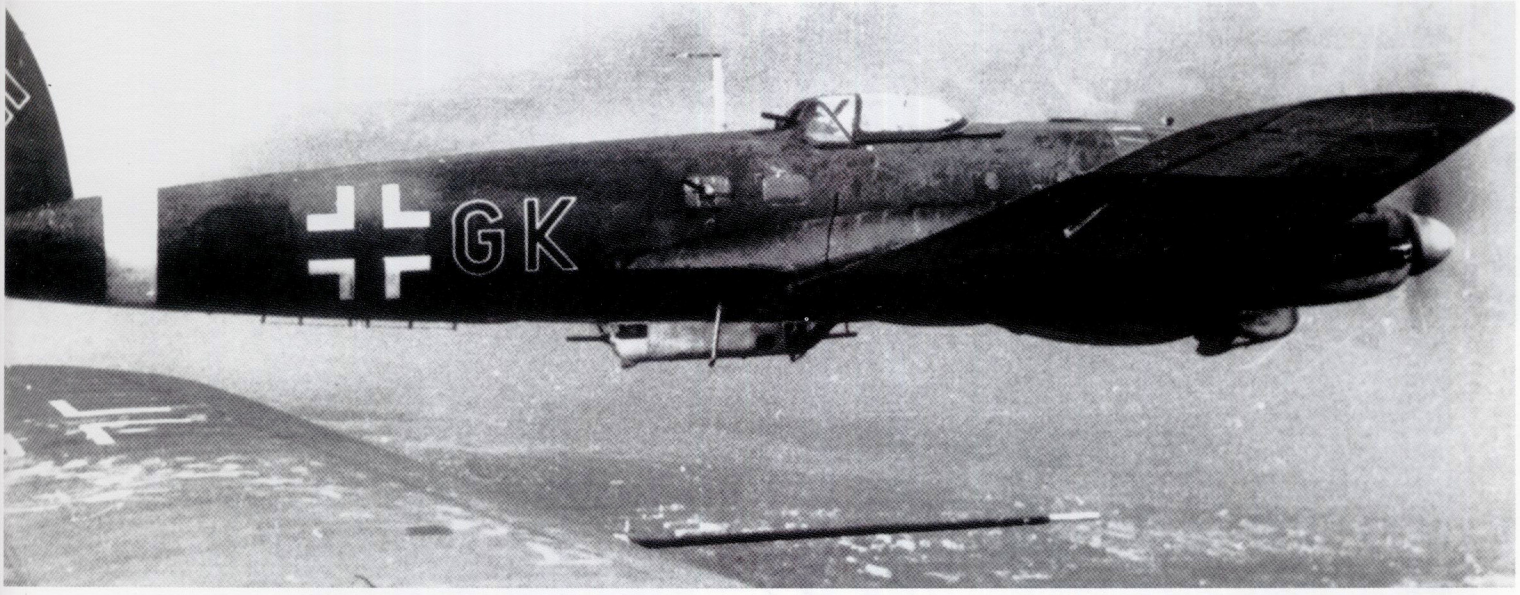
In their opponents' estimation, during the Sicilian campaign of July and August 1943 the *Luftwaffe's* bomber force had made:

> *'a serious attempt ... to oppose Allied operations ... by weighty night attacks against shipping, chiefly in Sicilian harbours. In spite of the comparatively large number of aircraft and the novel target-spotting tactics introduced, the results were negligible, while losses in aircraft were high.'*

Salerno

When Allied troops reached the Italian mainland on 3 September 1943, *Luftflotte* 2's bomber force was based around Foggia. They did not oppose these first invaders but three nights later, 79 Ju 88s and He 111s raided the Tunisian port of Bizerta in three waves, in an effort to cripple the ships assembling for the imminent landings at Salerno. This attack saw the first use of *Düppel* (German 'Window') in the Mediterranean and although it 'saturated' Allied radar, AA gunners claimed four aircraft shot down and Beaufighters another five while 'not a ship was hit.' For ten nights after the landings of 8 September (which took place just 110km from the German bomber airfields) 'a last despairing attempt' was made to dislodge the Allies but was blunted by the defences over the target itself and by attacks on *Luftwaffe* bases. Prisoners were taken from 6./KG 30, 5./KG 54, 8./KG 54, II./KG 76 and 5./KG 100 after being shot down by night fighters over Salerno. On 18 September, the Italian-based *Kampfgruppen* withdrew to airfields in Northern Italy, the I. and II./KG 1 continuing to Germany for conversion to the He 177.

BELOW:
He 111 H-6s from 2./KG 100, flying in formation over the Italian countryside on their way to attack shipping. The aircraft in view is coded 6N+GK, with the letter 'GK' being thinly outlined in white.



On 30 September, Free French Spitfires intercepted ten of KG 100's Do 217s, 12 miles off Ajaccio, Corsica shooting down three. The survivors attacked the harbour from about 3,000m and set on fire an LST (Landing Ship, Tank) which was a total loss as well as scoring a near miss on a French destroyer. The one relative success amongst these setbacks was the employment of 'a weapon whose novelty came as a surprise to the Allies', *Fritz-X*, whose successes against Allied warships are described in *Kampfflieger* Vol. 3. These attacks had all but ceased by the end of the month, however.

In October the Allies were remarking on an unprecedented disinclination on the part of the Germans to use their bombers. There were just three raids, all at dusk. Ajaccio, was bombed by a small force on the 12th and Naples harbour on the 21st and 23rd but 'none of these attacks was conspicuous by its great success.' Returning from last of these raids, the Ju 88s encountered the perennial hazard of thick fog over their bases in the Po Valley and were forced to divert to other airfields as far apart as München and Grosetto. *Luftflotte* 2 bomber bases and strengths on 20 October were:

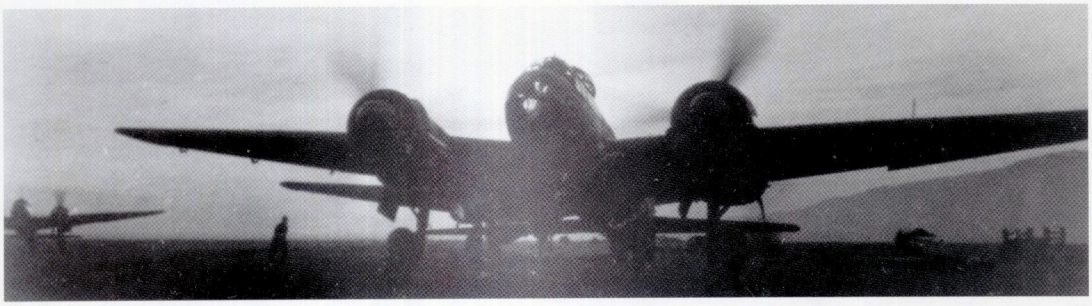
Luftflotte 2 bomber force, 20 October 1943

Stab KG 30	2	(2)	
I./KG 30	29	(14)	Ghedi
II./KG 30	33	(25)	Villafranca di Verona
Stab KG 54	3	(2)	
I./KG 54	35	(29)	Cameri di Novara
II./KG 54	36	(21)	Bergamo
Stab KG 76	2	(2)	
I./KG 76	25	(11)	Villaorba
II./KG 76	33	(22)	Aviano

BELOW: This colour photograph of an He 111 H-6 was taken at Kalamaki, Greece in 1943 and it belonged to 5./KG 100. Note the yellow-painted engine underpans and the flash cover over the front of the MG 151 gun barrel.

The operations mounted in November were a combined attack against the Corsican harbours of Bastia and La Maddalena and four raids on either Naples or shipping in the area. The previous month's lull had allowed the *Gruppen* to rebuild their strength and the scale of effort increased appreciably although atrocious weather over northern Italy grounded them from the 10th to the 23rd. In each raid, it was estimated that 25–40 aircraft were over the target, maintaining complete radio silence throughout. According to Allied Signals Intelligence, 'the W/T security of the bombers was impeccable': all that could be heard were weather reports broadcast to the returning raiders by their home bases.

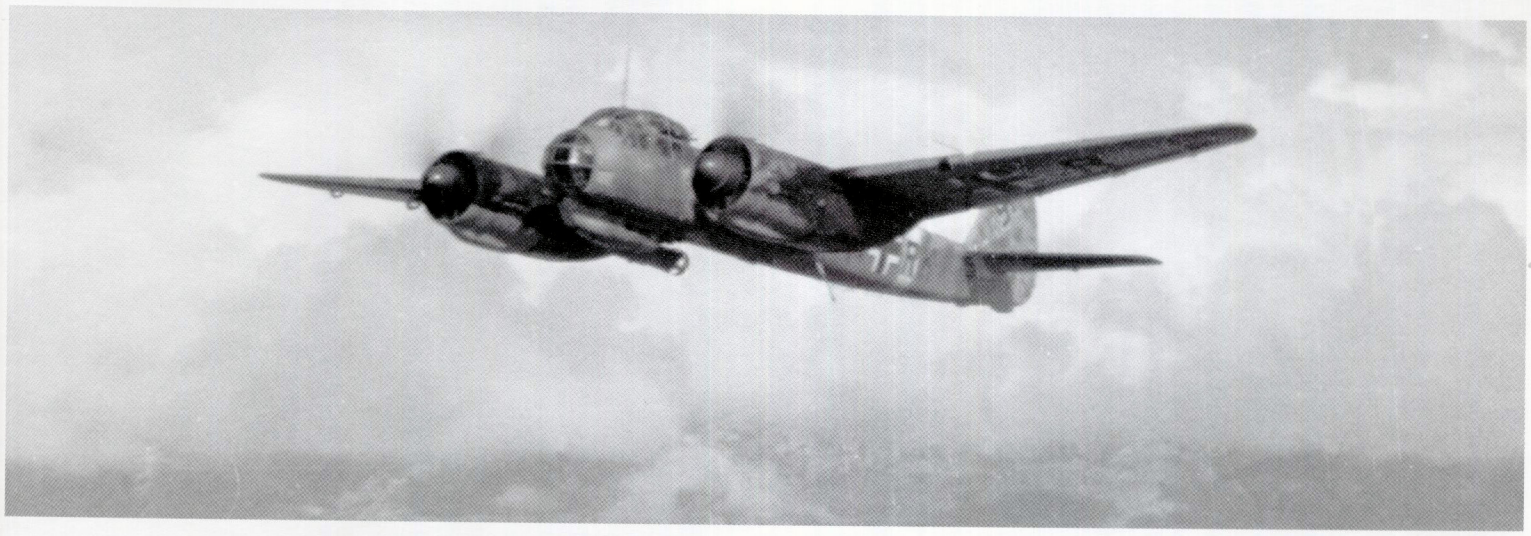
By the end of 1943, II./KG 76 was in Werneuchen converting to blind torpedo-bombing with FuG 200 (one *Staffel* specialising in pathfinding and illumination) but the events of January dictated their reversion to conventional bombing. A small detachment remained in Italy without aircraft until mid-January 1944 when it was able to muster six Ju 88s and ten crews. The rest of the *Gruppe* rejoined them early in March.



LEFT: A Ju 88 A-4, its engines running, awaits take-off for a mission over Italy. The ventral access hatch is still open with the ladder extended and a crewman can just be seen standing beneath the centre section. The aircraft's upper surfaces are in dark green with a pale blue or grey meander pattern, but the undersides are too deep in shadow to draw any conclusions as to their camouflage.

Yugoslavia and Greece

One of the *Luftwaffe's* lesser-known bomber units is the *Einsatzkampfgruppe Ju 88, General der Fliegerausbildung*, its name 'Operational Ju 88 Bomber Group, General of Flying Training' pointing to a combat formation assembled from flying school aircraft and personnel. It had its own unit code 'K5', a *Stab* and three *Staffeln*. In September 1943, British troops landed on islands in the Dodecanese and the *Gruppe* seems to have been deployed in the German campaign to retake them. Two Ju 88 A-4s, from the *Einsatzkampfgruppe's Stab* and 3. *Staffel*, were lost to fighters west of Castelrosso (an Italian possession off the Turkish coast) on 30 October, for example. On 15 November, the *Gruppenkommandeur, Hptm.* Karl von der Fecht was injured during an Allied air raid on Eleusis airfield, near Athens. Allied Signals Intelligence overheard aircraft of the 2. *Staffel* over Yugoslavia, where it was flying anti-partisan missions from Nisch, during December 1943 and again the following



March. Another scratch formation, *Gefechtsverband Sigl,* operated Ju 88s against Marshal Tito's forces from Udine, north east Italy from August–October 1943 with crews drawn from the *Verbandsführerschule* (formation leaders' school) at Tours, France.

Other than this, at the end of 1943 the bomber force in the eastern Mediterranean consisted of I./LG 1 at Eleusis and III./LG 1 at Heraklion, Crete. Both *Gruppen* had taken part in the autumn campaign in the Dodecanese, as had II./KG 51 (hastily redeployed to Salonika from the southern Soviet Union), II./KG 6 from France and elements of II./KG 100, some of whose crews were absorbed into LG 1 in November. According to a prisoner, when the Americans bombed Eleusis LG 1 lost 24 aircraft on the ground. On 3 December, *Lt.* Georg Sattler of of I./LG 1 acted as a pathfinder for a Ju 88 force attacking a radio station on Castelrosso. Ten days later, around 15 of LG 1's aircraft staged out of Tirana, Albania for an attack on Bari and against Catania and Augusta on the 31st.

ABOVE: A Ju 88 A-15, with the gondola under the nose removed, belonging to 1./LG 1, and coded L1+RK flies over mountains in the eastern Mediterranean on its way to a target, carrying a single PC 1400 (3,196 lb) armour pearcing bomb under the nose.

Bari

> *'The JU.88 units based in Northern Italy, which for some months had been eminently unsuccessful in their enterprises ... suddenly justified their existence in a sharp attack on BARI on the 2nd when — admittedly more by luck than good judgement — seventeen Allied vessels were sunk. But this was their swan song.'*
>
> No. 329 Wing RAF: Monthly Report No. 14, December 1943

The Bari attack followed the template of previous raids on Italian harbours: 105 bombers set out, crossed the coast over Ravenna and flew at low level down the Adriatic in complete radio silence. Turning west, they climbed and began dropping *Düppel* and 88 aircraft arrived over Bari from 19.00 (the rest had aborted). The 6./KG 54 was among the vanguard, laying a line of white flares to mark the edges of the harbour. Next, groups of green flares were dropped at random to mislead the defences before three reds marked the transport vessels which were the main targets.

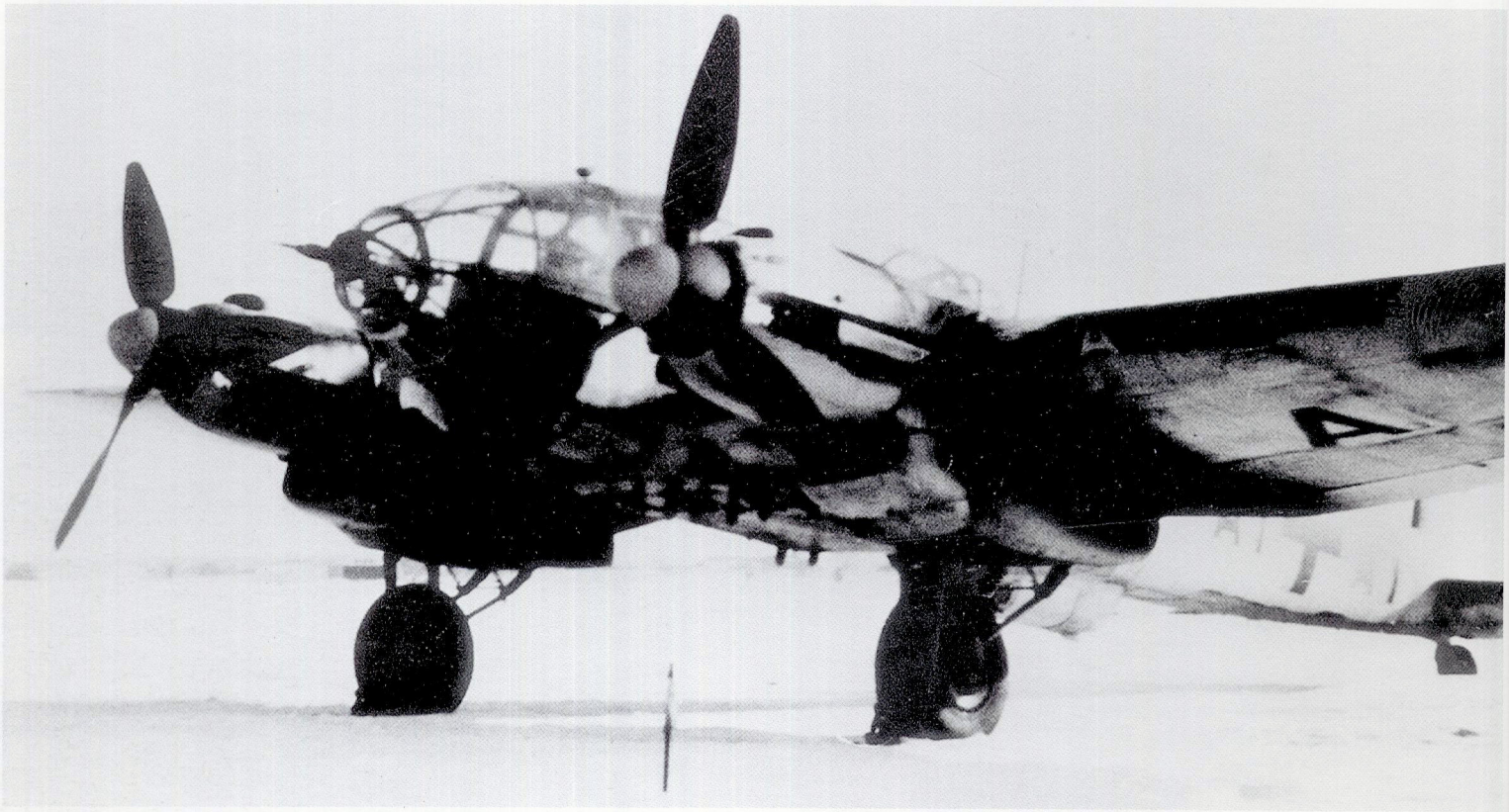
A convoy had recently arrived in the already crowded harbour and ships were moored all along the East Jetty. Unloading was urgent and the harbour lights had been turned on as darkness fell. Aside from the 17 ships sunk, another eight were damaged but catastrophic as the bombing itself had been — with a ruptured pipeline spreading burning fuel across the water and hits on the town — matters were made worse by the secret cargo of one of the merchantmen. The *John Harvey* had been carrying 100 tons of mustard gas bombs for retaliation if the Germans resorted to chemical warfare. When the *Harvey* was hit and blew up, no one aboard survived to warn of the corrosive poison now spreading in the oil slicks covering the harbour and the smoke of the numerous fires. The human consequences were appalling: service and civilian dead and injured ran into many hundreds and it was some time before the nature of the their often lethal chemical burns was identified and proper treatment could be devised.

Despite this success, with only two Ju 88s lost, Hitler had other plans for *Luftflotte 2's* bombers force and during December the greater part of it was withdrawn from Italy to Germany and France. The strongest indication of this was, ironically, 'over-indulgence in spurious W/T bomber activity' deviating from normal procedures and not coinciding with actual operations.

Summer 1943-May 1945

The Eastern Front

Late 1943–Early 1944



ABOVE: This He 111 H-6 belonging to 9./KG 53 coded A1+AT on the Eastern Front has been painted in temporary white winter paint. By the general appearance of this aircraft it looks as though it has been used extensively in action.

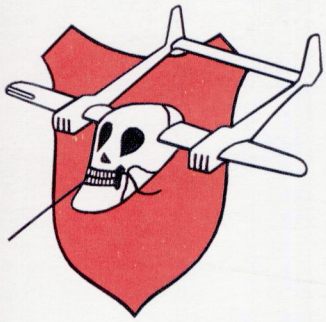
Although the Red Army kept advancing throughout the remainder of 1943, between August and December the bomber strengths of *Luftflotten* 4 and 6 were run down by around a third. The October 1943 reorganisation of the ground attack force could be seen as a watershed for the bomber units too, since the war in the East from then on was destined to revolve more and more around single-engined aircraft and close support on the battlefield. The results of strategic bombing might not be felt on the front line for weeks or months, those of tactical bombing perhaps not for days but close support operations promised immediate relief and that, increasingly, was what the troops of Germany and her Eastern Front allies needed.

KG 51 was operating over the southern sector when, in September, the *Stab* and III. *Gruppe* were withdrawn to Illesheim to convert to the Me 410 in the home defence role. After a 10-week deployment to Greece, II./KG 51 returned in late November. Two months later, it was supporting the German forces in the Cherkassy pocket and subsequently operated against Soviet forces in the Vinnitsa area. The *Gruppe* transferred to Poland for rest and refit on 31 January, before being withdrawn to Germany in the spring and becoming the new III./KG 3. The original III./KG 3 had been withdrawn in January to take part in the night defence of the homeland. Redesignated I. *(Beleuchter)*/KG 7 and equipped with Ju 88 A-4 and C-6 variants, it was an illuminator unit, sowing lines of parachute flares to guide the *Luftwaffe's* pursuit night fighters into RAF bomber streams; in March, the *Gruppe* was renamed I./NJG 7. It seems that by early 1944 there was a move underway to concentrate the Ju 88 units in the west and the He 111s in the east where the limited Russian night defences offered them a better chance of survival.

On 19 March came *Unternehmen Margarethe*, Germany's occupation of its ally, Hungary, to prevent Admiral Horthy's régime concluding a separate peace with the Allies. Presumably because it could spare nothing closer to hand, the *Luftwaffe* brought in three *Kampfgruppen* from the West to support what proved to be a swift and bloodless seizure of control. Early 1944 saw a four-month Soviet offensive in the south and KG 27 was heavily engaged in trying to shore up the German position in the Crimea until the peninsula was lost in May and the *Geschwader* moved back to the central sector of the front. It had

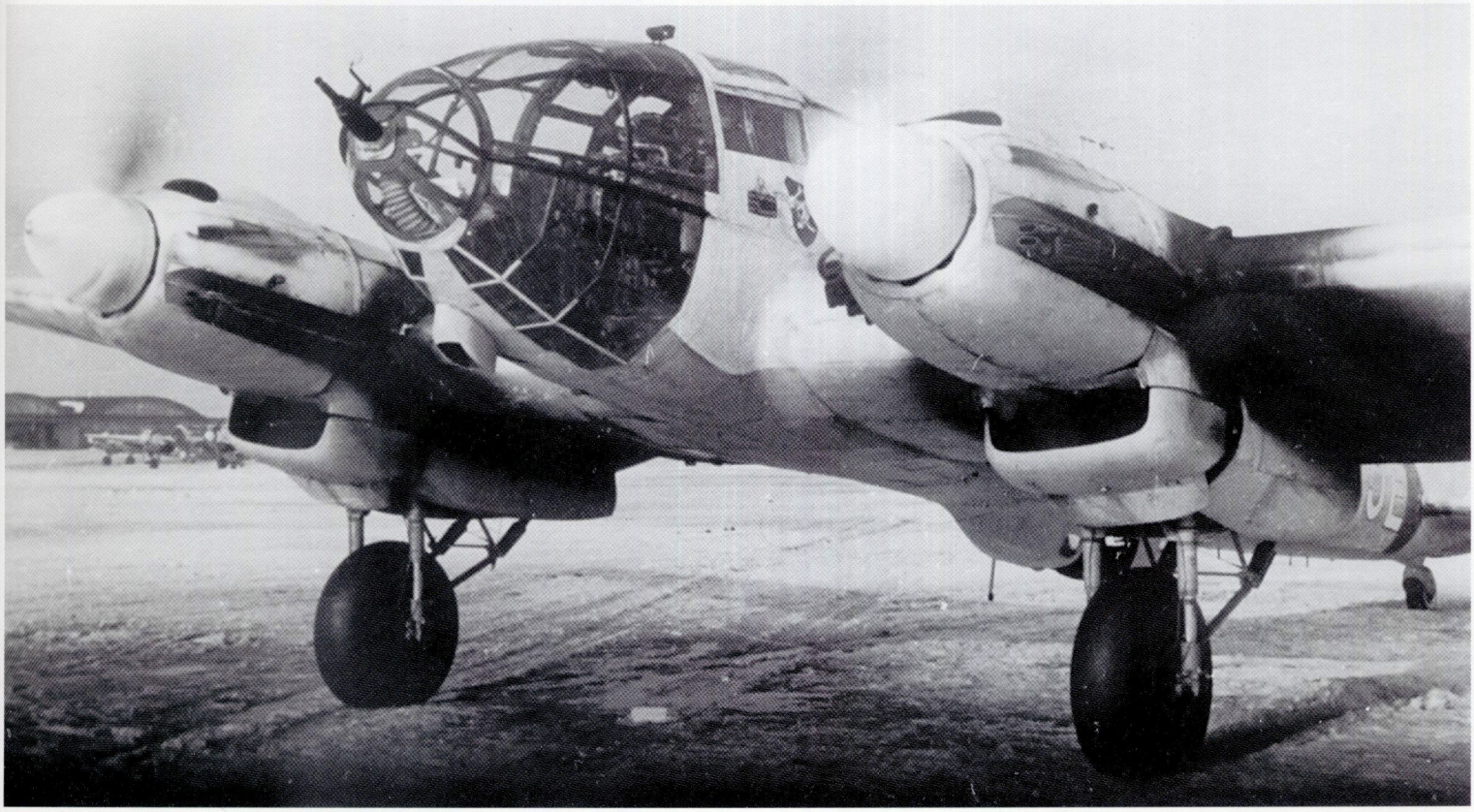
also been intended to bring in a scratch *Staffel* of He 111s from I./KG 26, then undergoing conversion in Germany. A group of Heinkels had been assembled at Flensburg under *Oblt.* Reimer Voss but no torpedoes had arrived and the blast pens were too small for bombers. Waiting in the open, nine were destroyed and a tenth crippled by strafing Mustangs. Consequently, the Ju 88s of *Hptm.* Rudi Schmitt's 4./KG 26 were drafted in to Focsani, Romania in April. From there they flew day and night armed reconnaissance over the Black Sea to keep the Soviet Navy away from shipping evacuating German troops from the Crimea. One night, a sizable flotilla was sighted on radar, headed for the peninsula. Reconnaissance next morning confirmed this as consisting of seven Soviet warships and an attacking force took off but their quarry turned for home, leaving the Ju 88s to bring their torpedoes back to Focsani. This deployment continued until mid May.

RIGHT: Wearing thick gloves as protection against cold metal, a ground crewman lays out AB 70 canisters ready for loading into the bomb bay of an He 111 H-11 of III./KG 53 on a snowy airfield on the Eastern Front. The canisters are painted in two different colours, which may indicate that they contain different types of bomblets. The load suggests that the Heinkel's mission will be against infantry concentrations or soft-skinned vehicles. The underside of the aircraft is in shadow, but appears to be in blue 65 with no darker overspray for night operations.

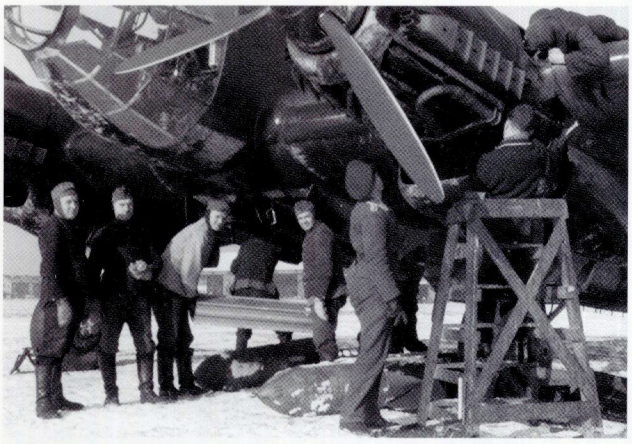


2. Schleppgruppe 4 emblem

BELOW: Throughout the winter of 1943/44 the Luftwaffe was hard pressed to keep the Army supplied with equipment and food. This He 111 H-16 coded ??+JE, belonged to 2. Schleppgruppe 4 and has the unit emblem painted in the fuselage nose below the pilot's window. The aircraft has been painted in a temporary white winter camouflage.



Summer 1943-May 1945



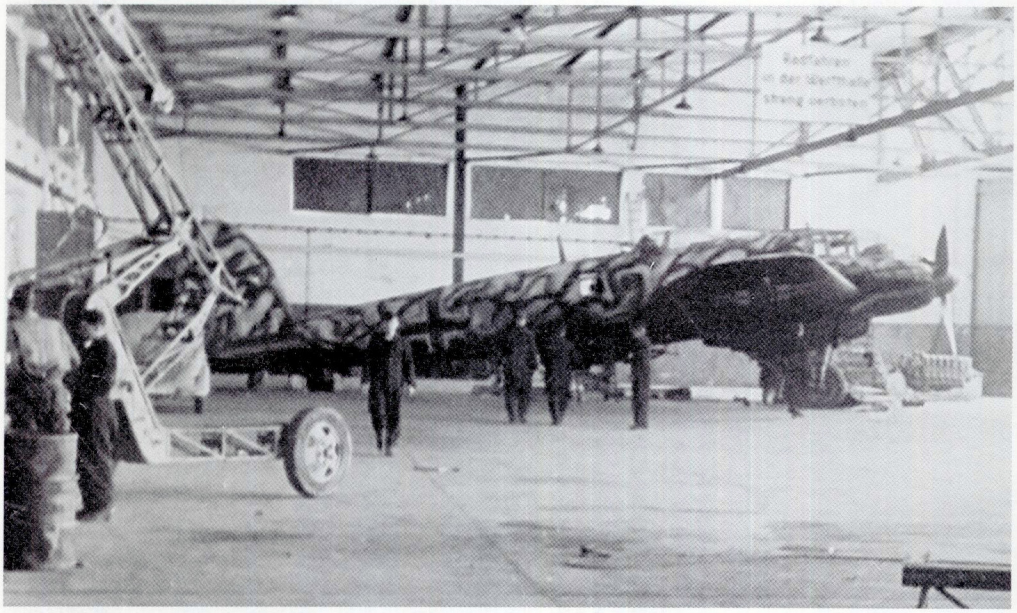
LEFT: An He 111 H-6 being made ready for another mission after a snow fall during the early winter of 1943.

RIGHT: Somewhere on the Eastern Front, Uffz. Gugel of III./KG 53 returns from his 200th combat mission. The occasion is marked with a garland, a wreath of pine branches and — as other photos in the series show — a bottle of three-star Grande Réserve brandy. His He 111 has been camouflaged for the winter in a rather patchy coat of white on its upper surfaces. A 'full' type B1 Balkenkreuz is visible on port wing.

LEFT: Looking distinctly unimpressed, an Unteroffizier, a Feldwebel and a third airman in flight overalls lean on the tail of He 111 '+AD' of Stab III./KG 53. The aircraft has a cloudy mottle camouflage of pale blue or grey over dark green. The partial Werknummer '161…' on the fin suggests that this is an He 111 H-16. Code letters are black, thinly outlined in the Stab colour of green or blue, while the Hakenkreuz is of the late war, white outline type.

BELOW: A group of airmen wait beneath an He 111 H-11 (as indicated by the fore and aft guns in the ventral gondola). The Heinkel has black mottling over its pale blue undersides. The underwing cross is a type X and the mottling has impinged on it slightly. Also visible are the antennae of the FuG 101 radio altimeter. Guns both fore and aft in the ventral gondola indicate that this is an He 111 H-11. The open jacket and shirt of the Feldwebel standing on the right suggest spring or summer weather. (Note: almost certainly A1+AD, as in photograph above.)

BELOW: He 111 H-11, 'Yellow E' of 9./KG 53. It has a heavy dark grey or green meander over a pale grey base scheme and its undersides are black. Crosses are the narrow type B1a on the fuselage and white outline B5 under the wings. It has yellow spinner tips and shrouds on its exhausts. The hangar's blackout curtains are torn and the sign hanging from the roof reads: 'Cycling in the workshop hangar strictly forbidden.'



Western Europe and the Home Front

Late 1943–Early 1944

Regrouping

The I./KG 51 had been withdrawn from the Eastern Front in May 1943 to convert to the Me 410 and went into action in the bomber destroyer role from Illesheim and Linz-Hörsching during September and October. Both the Me 410 and its WGr. 21 mortars proved disappointing, the *Gruppenkommandeur*, *Major* Klaus Häberlen, was relieved of command and I./KG 51 retrained for night bombing. As we have seen, the III. *Gruppe* had also been brought back for conversion but was disbanded at the end of the year.

Behind the front lines of the *Luftwaffe* bombers' war were the IV. *Gruppen* of LG 1 and KG 1, 2, 3, 4, 26, 27, 30, 40, 51, 53, 54, 76, 77 and 100. These formations were functionally equivalent to the RAF's Operational Training Units but reflected the German philosophy that replacement crews should be brought up to combat status within the *Geschwader* they would see action with.

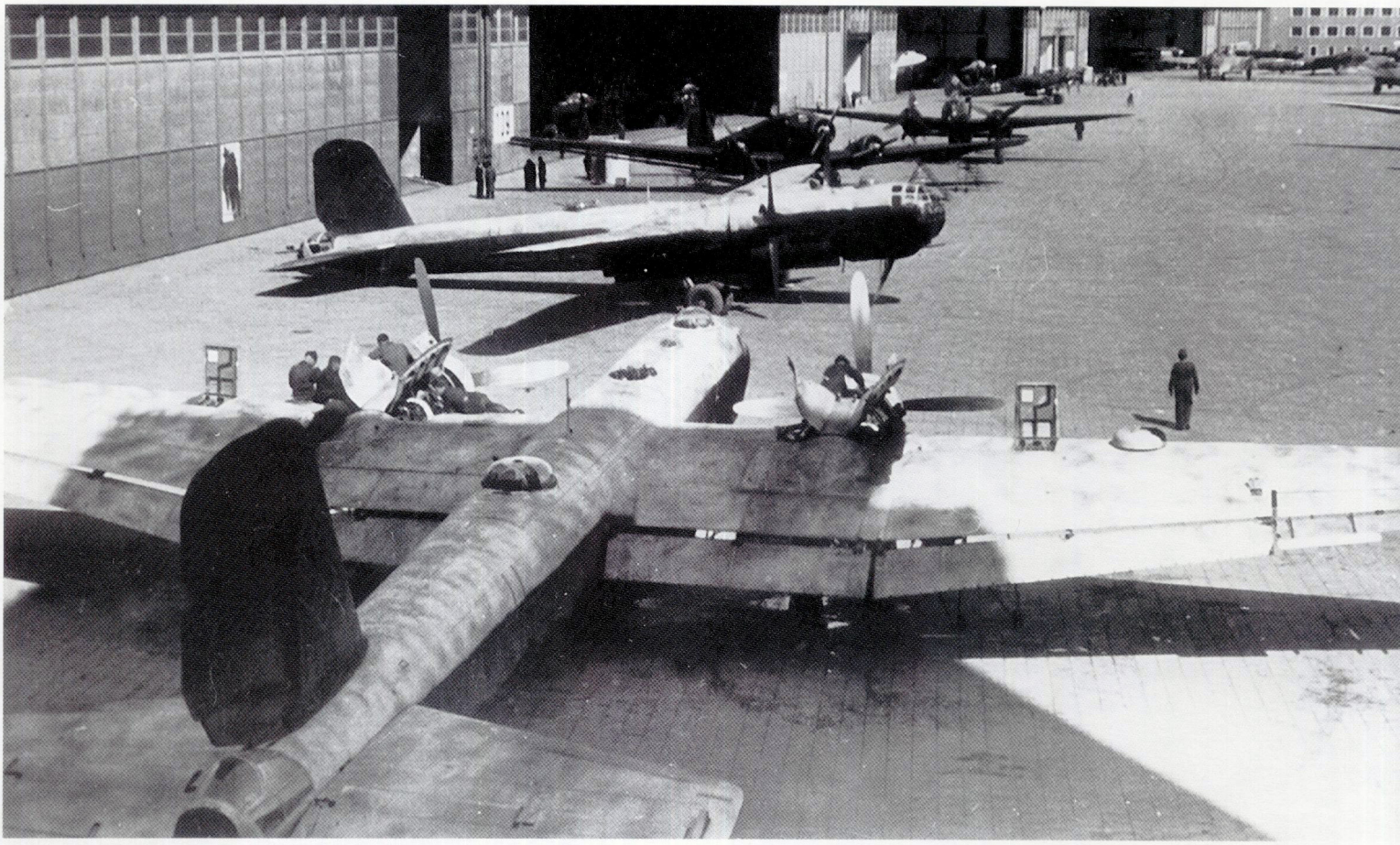
ULTRA decrypt VL 5736

On 5 February 1944, IV./LG 1 [at Wiener-Neustadt] had 31 Ju 88s and 4 He 111s of which 11 Ju 88s and 4 He 111s were in workshops; 5 Ju 88s and 1 He 111 were unserviceable for more than 8 hours.

ABOVE: Members of 3./KG 77 celebrate with a drink on the occasion of the 300th operational mission flown by the Staffel. The spinner of the Ju 88 appears to have a white tip with the remainder being painted yellow.

BELOW: The aircrew here look surprisingly relaxed as they wait by the wreckage of a crash-landed Heinkel He 111 H, A1+EU of 10./KG 53. The IV. Gruppe of a bomber Geschwader provided operational training, as indicated by the narrow yellow fuselage band. The aircraft is camouflaged in standard 70/71/65 and appears to have the late-war white outline crosses on the upper wings. On the fin is W.Nr. 3965 in white.

Summer 1943-May 1945



ABOVE: After a long and difficult trial period, finally the improved He 177 A-5 left the production line and was destined to take part in the bombing attacks over the British Isles in 1944. These two early production A-5s, can be seen at München-Riem in March 1944. This variant had been subject to some structural re-design which included the engine installation. The 24 cylinder BD 610 often caught fire in earlier variants with the aircraft being dubbed the 'flying fire-lighter' by crews, but although the crews continued to eye the He 177 with suspicion, the fire risk on this variant was largely eliminated.

Harassment

October saw I./KG 6 complete its transition to the Ju 188 but 2. and 3./KG 66 were still not fully operational. A complex operation was mounted on the night of 7/8 October when two waves attacked London and 39 aircraft attempted a raid on Norwich, strewing high explosive and incendiaries across East Anglia and using *Düppel* over Britain for the first time. On the 9th, V./KG 2 was sent up in the daylight against American heavy bombers and was active during the Schweinfurt raid on the 14th which cost the 8th Air Force so heavily. On the night of the 15/16th, a small force of Ju 188s from I./KG 6 lost three of their number in an operation against London and two nights later a mixed force of Me 410s, Fw 190s and Do 217s attacked the capital — operations by the light forces were now getting pathfinder support from I./KG 66. The Hull Docks were attacked by 49 aircraft on the 20/21st and Great Yarmouth three nights later. Operations on the last two nights of the month cost III./KG 6 a total of four Ju 188s.

Experience of GAF Long Range Bomber Pilots

In 1942 there were fewer pilots shot down with only a small number of sorties to their credit than might have been expected if the flow of trained pilots had followed a normal course. The number of experienced pilots was unusually great.

In 1943 there were many new pilots shot down with little experience and their number was perhaps higher than was to be expected...

The natural explanations are:

(i) that in 1942 there was a shortage of of replacement pilots with a consequent loss of many highly experienced pilots;

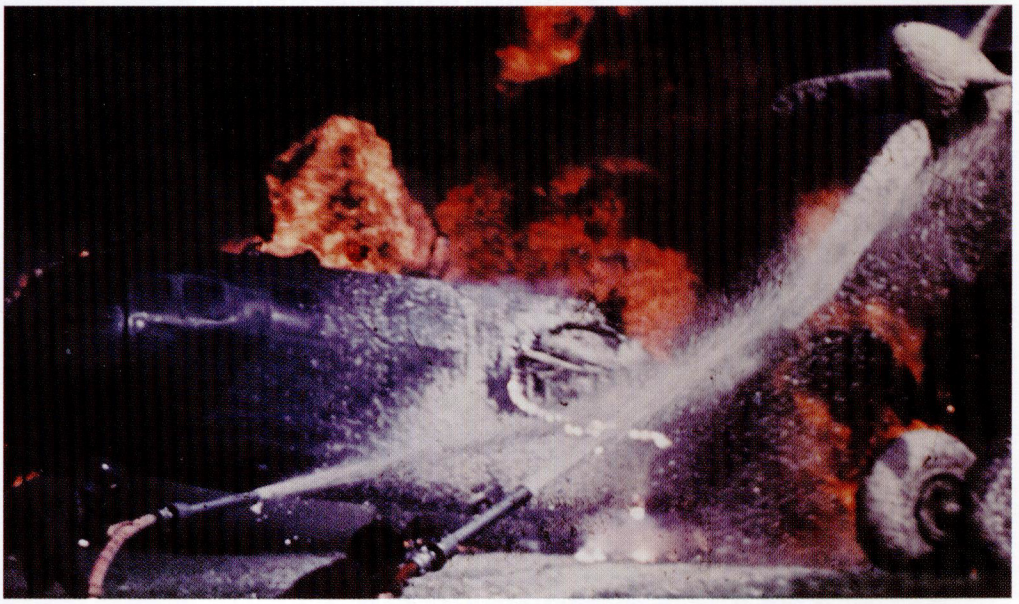
(ii) that in 1943 the flow of new pilots into the GAF [German Air Force] started again; and since perhaps the number of these shot down was higher than might have been expected, the inference is that new pilots coming into LRB [long range bomber] units in 1943 are not so well trained as they should be.

The above conclusions confirm the sequence of events known from other sources and show that the readjustment of the training programme has perhaps so far proved inadequate.

RAF Air Intelligence Branch 3(E) Report, 19 October 1943

ABOVE: An air-to-air photograph taken during a training flight over Germany, either late 1943 or early 1944. The He 177 A-3 nearest the camera coded 6N+IS belongs to 8./KG 100.

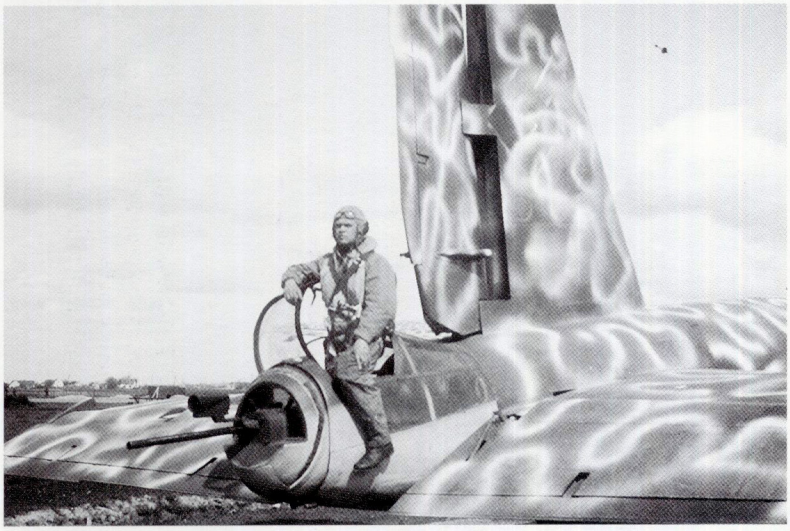
ABOVE: On 25 April 1944 Schwäbisch Hall was attacked by P-51 Mustangs of the US Eigth Air Force. This rare colour photograph was taken from a road outside the airfield, during the raid.



ABOVE, CENTRE RIGHT AND RIGHT: These photographs show a He 177 of KG 100, burning fiercely after the aforementioned attack on Schwäbisch Hall. The intense heat given off by the fire can be seen by the distance the fire-crews are screening themselves from the burning wreckage. Also see opening page for a distance view of the burning aircraft while another He 177 stands with engines running, awaiting developments.

Summer 1943-May 1945

In all, IX. *Fliegerkorps* had flown 431 bomber sorties during October but, charged with building up its strength to face a feared Allied invasion, put up just 235 in November. During the month, orders were issued for III./KG 76 to transfer from France to Linz-Hörsching; II./KG 6 returned from a rest period and 4./KG 66 was newly established. KG 6 made nuisance raids on south coast towns on the night of the 1st/2nd; a week later, KG 2 sent 40 bombers to Ipswich. A week after that, 36 Do 217s of KG 2 with six Ju 88s and four Ju 188s drawn from KG 6 and KG 66 lost five of their number in an attack on Plymouth. The He 177s of I./KG 100 augmented IX. *Fl.Kps.* in December but it flew only 118 sorties, killing 10 British civilians and injuring 41. Bad weather ensured that bombing of a ball-bearing factory in Chelmsford on the 10/11th was not concentrated. On 4 December, Typhoons of Nos. 198 and 609 Squadrons RAF were marauding over Holland when they surprised eight Do 217s of 3./KG 2 on a daylight *Gruppe* formation practice, shooting down five. Exactly a month later, the same squadrons caught III./KG 2, accounting for three of its aircraft as well.

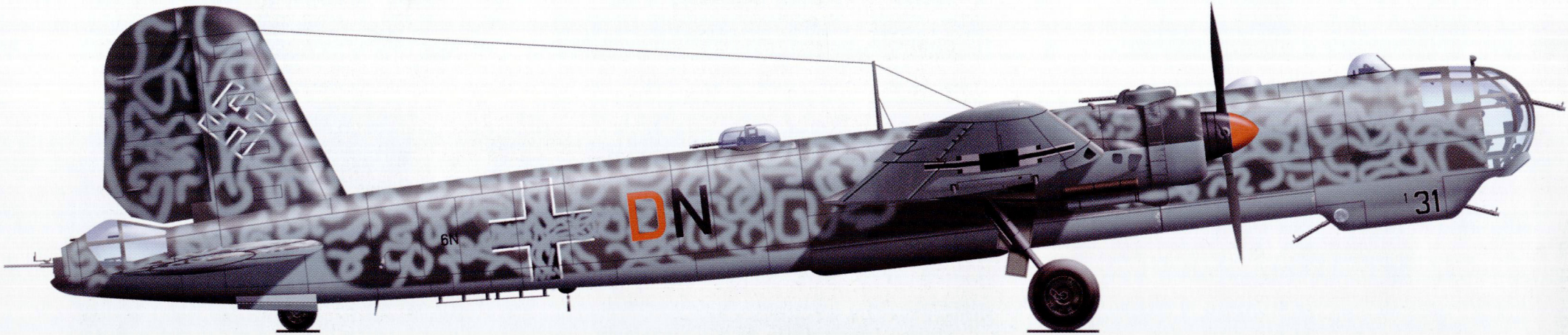


ABOVE: Standing proudly in his He 177 A-3 with one foot inside the tail gun position is Gefr. Adolf Dops, the rear gunner in 6N+DN.

RIGHT: Standing in front of their He 177 A-3 the flight crew are, third from left, Uffz. Hans Fontius, radio operator, Staffelkapitän Hptm. Hans Schucke, bomb aimer, Ofw. Willy Niederstadt, pilot and Ofw. Paul Balke, aircraft mechanic. The front portion of the spinner has been painted red in the Staffel colour.

THIS PAGE: These photographs taken early in 1944 show a He 177 A-3 of 5./KG 100, coded 6N+DN at Aalborg, Denmark. The aircraft carried the original standard factory camouflage pattern but the upper surfaces have been heavily oversprayed in a random zig-zag pattern of RLM 76. It was found that this kind of camouflage was particularly effective for flying over water. *(ABOVE)* The crew from left to right are, Ofw. Willy Niederstadt, pilot, Ofw. Paul Balke, aircraft mechanic, Ogfr. Hans Balbach, chief gunner, Gefr. Adolf Dops, rear gunner, Uffz. Hans Fontius, radio operator and Staffelkapitän Hptm. Hans Schucke, bomb aimer.

This is the same He 177 A-3 of 5./KG 100, coded 6N+DN as shown on the photographs opposite. The aircraft carried the standard camouflage pattern but the upper surfaces have been heavily oversprayed in a random scribble pattern of RLM 76. It was found that this kind of camouflage was particularly effective for flying over water. The crew from left to right are, Ofw. Willy Niederstadt, pilot, Ofw. Paul Balke, aircraft mechanic, Ogfr. Hans Balbach, chief gunner, Gefr. Adolf Dops rear gunner, Uffz. Hans Fontius, radio operator and Staffelkapitän Hptm. Hans Schucke, bomb aimer.

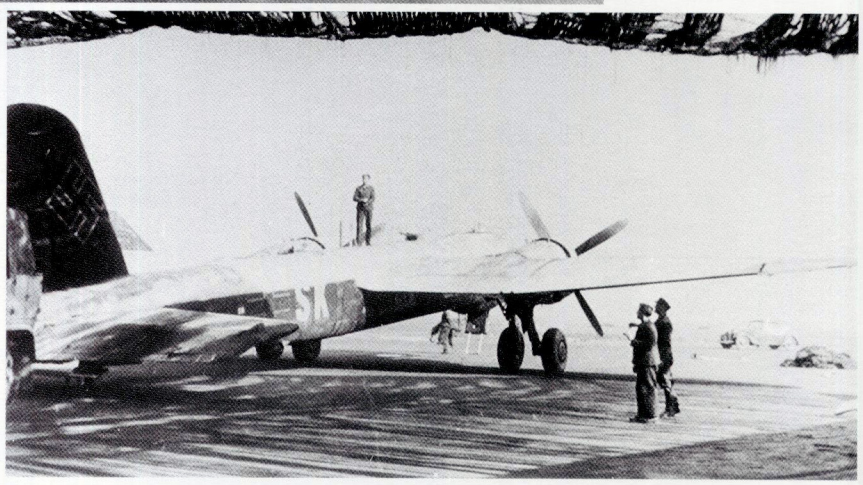


Heinkel He 177 A-3 coded 6N+DN of 5./KG 100, spring 1944

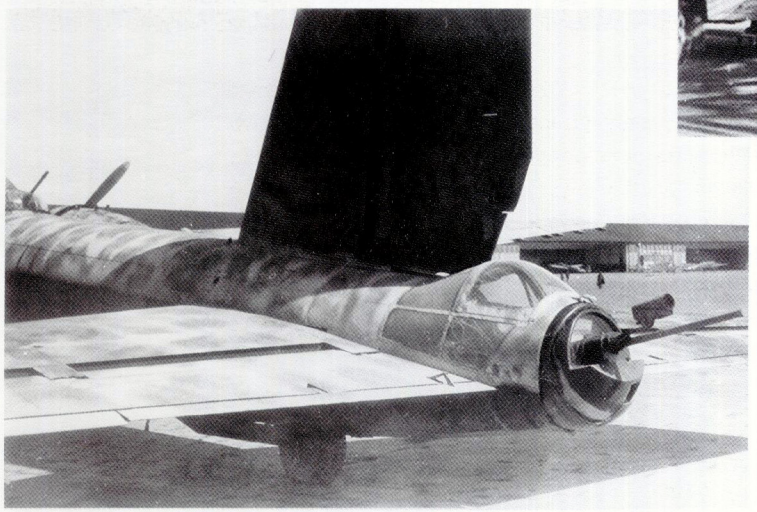
This machine carried the standard factory splinter pattern of 70/71 and 65 with 71/02 mottling on the fuselage sides. The ground crew have overpainted the whole upper surface and fuselage sides with in a continuous wave pattern using RLM 76. It was found that this particular finish was especially effective when flying over water.

Summer 1943-May 1945

ABOVE AND LEFT: Parked near the hangars at Faßberg this machine, operational with 5./KG 100 was coded 6N+HN. The crew are grouped in front of the aircraft discussing final flight plans.



ABOVE: This He 177 A-5 coded 6N+SK of 2./KG 100 is undergoing maintenance under a makeshift camouflaged netting.



LEFT: Close-up of the tail gun position fitted with an MG 151 cannon. Note the large gun-sight fitted above the gun barrel.

A new Kampfgeschwader

February 1944 brought the establishment of KG 200, an odd amalgam of units for dropping agents behind Allied lines (I./KG 200) and experimental formations (II./KG 200): conspicuous by their absence were any conventional bombers. The 1. *Staffel* of the II. *Gruppe* [2] was to develop the *Kochgerät*, a glider-deployed explosive boat for use against ships at anchor, a concept which came to nothing. The 2. *Staffel* had originally been conceived as an anti-ship suicide unit using 'manned glide bombs' — a then non-existent weapon — and would, after months of delusion and indecision, emerge as *Sonderverband Einhorn* ('Special Force Unicorn') a *Staffel* of Fw 190s adapted to carry unusually heavy bombs which operated over Holland, Italy and Germany. The 3. *Staffel* consisted of airborne troops who went into action against the French *Maquis* on the Vercors Plateau in July 1944.

The agent dropping *Kommandos* were typically two or three aircraft strong and with operatic codenames like *Carmen* and *Toska*. They were active from bases in Greece, Italy, Western Germany and Eastern Europe, using a selection of German and captured bomber and transport aircraft — whatever was available and had the necessary range and capacity.

The Mediterranean Convoys

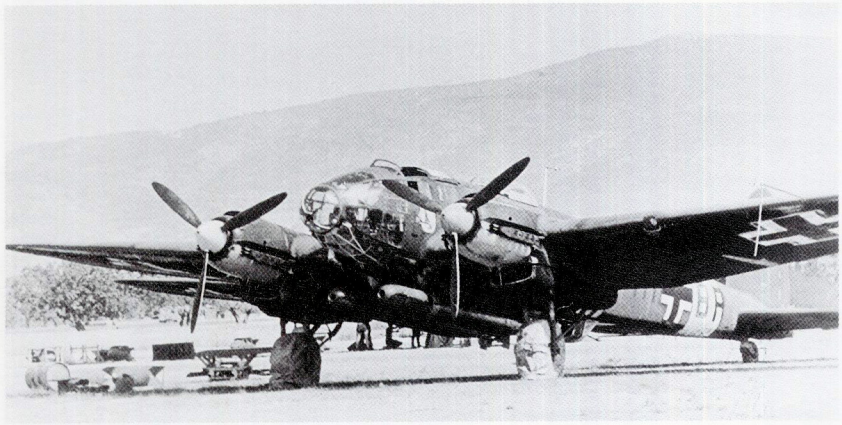
August–December 1943

RIGHT: During a reconnaissance mission over the Mediterranean, Ofw. Bach in this Ju 88 A-6 of 1.(F)/123, was chased by Allied fighters and during his escape back to his base in Perugia, he flew so low that the propellers made contact with the water. The wooden propeller blades splintered, but they shattered evenly allowing the engines to keep running and the pilot slowly managed to return to base.

The staff of 2. *Fliegerdivision* moved to Montfrin, near Avignon following the German occupation of Southern France in late 1942. Until mid-1943 its only striking power consisted of two *Ergänzungsgruppen*, IV./KG 3 and IV./KG 76. Airfields were developed to support bombers and in June, I. and III./KG 26 came to Salon and Montpellier respectively, to rest and refit. The *Division's* job then became the engagement of Allied convoys along the North African coast (where, incidentally, they enjoyed land-based fighter cover). These missions entailed round trips of between 1,300 and 2,400 km. Targets were tracked by two Ju 88 reconnaissance *Staffeln* and by signals intelligence. Attacks averaged 60 torpedo aircraft in loose waves, crossing a check point on the French coast at a precise time, turning near the Balearics and running in from a designated Initial Point, all at 60 m to evade Allied radar. A system evolved of attacking at dusk from several directions, the aircraft heading home singly.

2. KG 200 did not adopt conventional *Staffel* numbering until November 1944.

Summer 1943-May 1945



ABOVE: An He 111 H-6 converted to carry torpedoes belonging to 6./KG 26, stands ready for a mission on an airfield in Southern France. The aircraft is coded 1H+BP with the individual aircraft letter 'B' painted yellow on the wide white Mediterranean theatre fuselage band. The emblem of KG 26 is painted on the nose and on this occasion the spinners have also been painted yellow for the Staffel colour.

On Friday 13 August, convoy MKS 21 was attacked off Alborán Island, between Spain and Morocco. This operation, codenamed *Paukenschlag* (drumbeat) was directed by KG 26's *Kommodore*, *Major* Werner Klümper. According to an 8. *Staffel* pilot, Klümper let three convoys pass before he judged conditions ideal. Forty He 111s of I./KG 26 formed the first wave, followed by 28 Ju 88s of the III. *Gruppe*, the latter carrying only one torpedo each in view of the extreme range involved. A huge success was claimed with many ships reported burning. Klümper got the *Ritterkreuz* but the only merchantman lost was the *Francis W. Pettygrove*, towed to Gibraltar and later scrapped.

Contact keepers and leading strike aircraft were fitted with FuG 200 search radar, cutting the speed of I./KG 26's He 111s by 25 km/h and that of the III. *Gruppe's* Ju 88 A-14s by 20 km/h as well as rendering one-motor flight almost impossible. The provision of flame dampers just compounded the problem and some aircraft also received FuG 216 tail-warning sets. Experimentally, 21 cm rockets were provided to suppress AA fire but the only He 111 to take these weapons into action was shot down before it could launch them.

With the Allies established in Sardinia and Corsica, the torpedo-bombers became liable to interception throughout their missions and ZG 1's Ju 88Cs were brought in, the C-6s flying close escort, the C-3s sweeping ahead of the attack formation. Losses were substantially reduced but ZG 1 had prior commitments over the Bay of Biscay and was not always available. To split defensive fire, III./KG 100's Do 217s were employed, going in with guided weapons 5–6 minutes ahead of the main force, since they needed good visibility to launch. Dusk attacks in fair weather were all too predictable and so night attacks were essayed, using the moon path to light the target. This however limited opportunities to about 10 nights a month and made the job of the defending fighters easier while the strong shadows impeded aiming. Next, a *Staffel* of KG 76 was brought in from Italy to lend its expertise in route marking (with *Lux* buoys) and target illumination. When night fighters then concentrated over the visual sea markers, *Schwan* radio transmitters were tried instead but not enough were ever available to develop the technique fully.

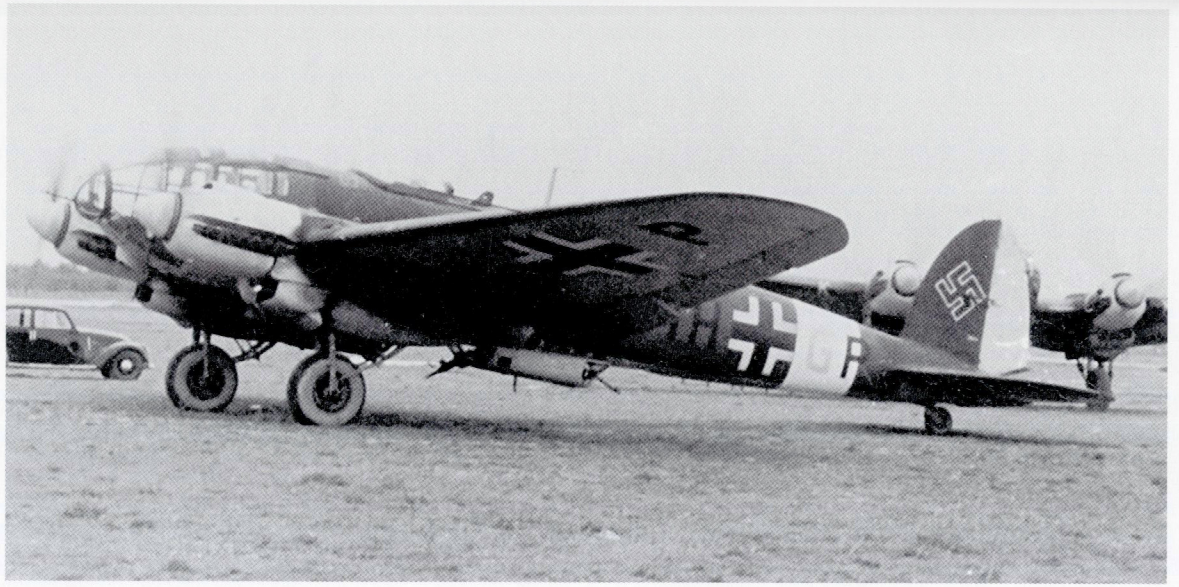
On the night before the Salerno landings, I./KG 26 had staged out of Grosseto against a convoy about 160 km south west of Naples (see *Kampfflieger* Vol. 3). In October 1943, two convoys were attacked off Cape Tenez: the shadower for the second of these missions was shot down and so the bombers hit the wrong convoy, an empty one leaving the Mediterranean. The effort in November was greater and assessed by the Allies as more threatening to their supplies than attacks on harbours. Of the four operations mounted, three made contact but on the 12th, the operation against convoy 'Dunnock':

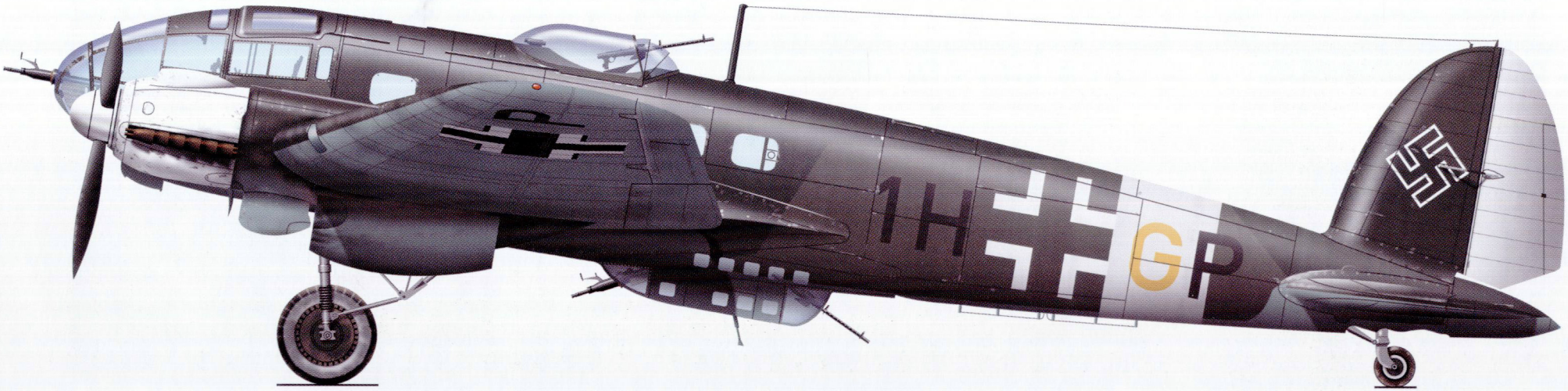
'... resulted in the complete failure of the bombers to locate the target. At 1900 when the attacking force was well on its outward flight, the position of 'Dunnock' was broadcast by the bomber control as over land [!], *10 miles south-west of CAPE TENEZ. This mistake was repeated at 1917 and not corrected until 1928 when the true position of the convoy at 1550, as reported by the last reconnaissance aircraft of 1.F33, was substituted.'*

The attack on 'Annex' on 26 November was notable in that KG 26's torpedo bombers and the missile-carrying Dorniers of II./KG 100 were reinforced for the first time by He 177s and Fw 200s from KG 40. One prisoner related that III./KG 26 arrived late and in bad weather, so took its torpedoes home, five Ju 88s crashing at base. The convoy was protected by USAAF, RAF and French fighters and II./KG 40 lost six He 177s in return for sinking the troopship *Rohna* with over 1,000 deaths among her crew and the American soldiers and Red Cross personnel she carried.

In December, to the Allies' mystification, there were no convoy attacks at all in the Western Mediterranean but I. and III./LG 1 operated from Greek bases against a convoy midway between Malta and Benghazi on the 16th. These Eastern Mediterranean operations took LG 1 as far afield as Tobruk and reportedly aircraft were frequently lost through running out of fuel. When not attacking hostile convoys, these *Gruppen* escorted German ones in the Aegean.

He 111 H-6s from 6./KG 26 after just landing from a mission over the Mediterranean. The aircraft taxiing nearest the camera is coded 1H+GP and it is likely that they all carry the KG 26 emblem on the nose as is evident on the furthest He 111 where the emblem, with a background colour of yellow representing the 2. Gruppe, is just discernible on the nose. As well as the wide white Mediterranean theatre band, the aircraft have also had their engine cowlings and rudders painted in the same colour. An additional interesting feature of the lead aircraft is the white-walled tyres. Many Luftwaffe aircraft were seen with white-walled tyres and these are particularly common on Bf 109 tailwheels. The white coating, which contained an anti-static agent, was applied at the time of manufacture by the tyre company as generally all tyres were made from synthetic material not rubber.

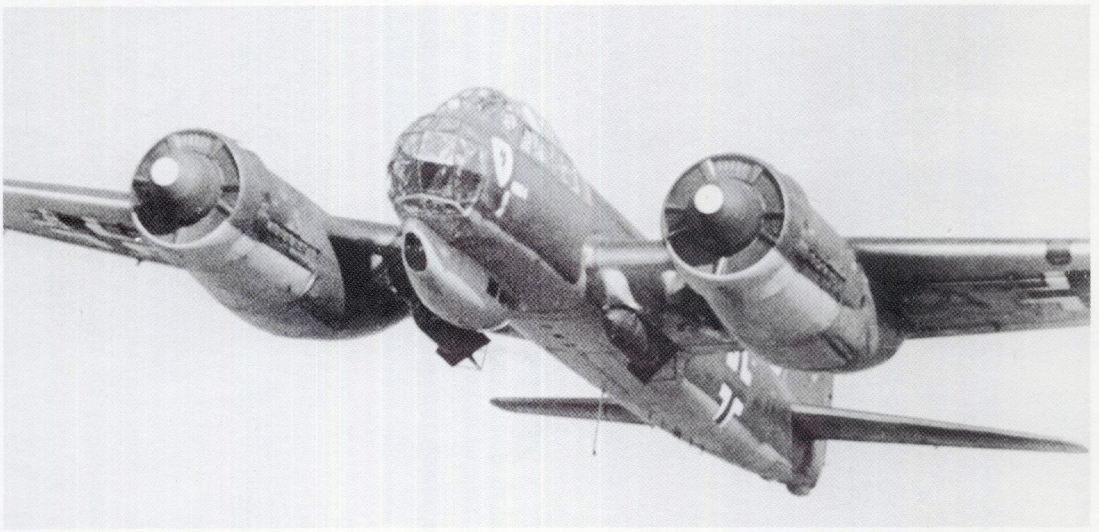




Heinkel He 111 H-6 coded 1H+GP of 6./KG 26, Italy, summer 1943
This aircraft carried the standard factory finish of 70/71 with 65 underneath. It would appear that aircraft from this Staffel were painted with some special recognition features. As well as carrying an extra wide white painted fuselage band for the Meditteranean Theatre they also had the front of the engine cowlings and rudder painted white .

Summer 1943-May 1945

Operation Capricorn



RIGHT: This fully loaded Ju 88 A-4 belonging to I./KG 30 appears fairly new and still retains its standard factory finish of 70/71 on its uppersurfaces and 65 underneath. Note the 'Diving Eagle' unit emblem on the nose.

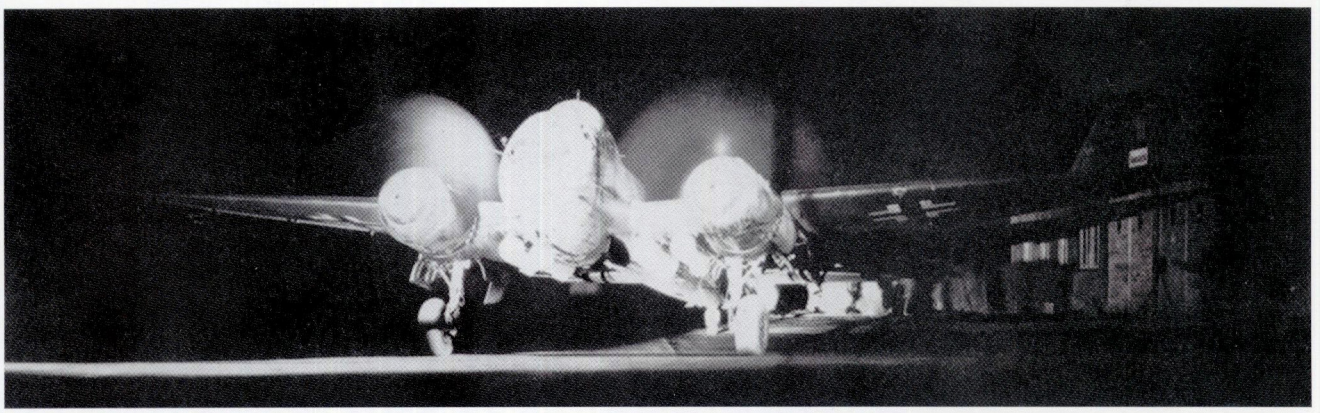
BELOW: The number of ground crew in evidence in this photograph of a Ju 88 A-4 of I./KG 30, would suggest that some instruction is taking place on how best to install the bomb load. It was common practice in the Luftwaffe that ground personnel were encouraged to learn as many skills as possible in the servicing of aircraft so that they could turn their hand to helping with many servicing requirements.

At the end of November 1943, *Genmaj.* Peltz had been called to a conference where Göring informed him that he was to lead a renewed large-scale bombardment of Britain, and of London in particular. The enterprise was given the codename 'Capricorn'.

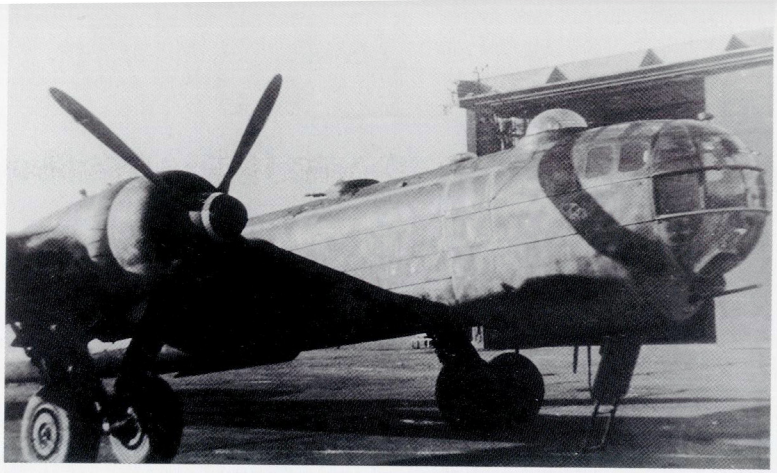
Hopes of getting operations underway during December proved unrealistic but by the third week of January, a force approaching 600 aircraft had been amassed by stripping five *Gruppen* from the Italian front and completing the rebuilding of units already in the West:

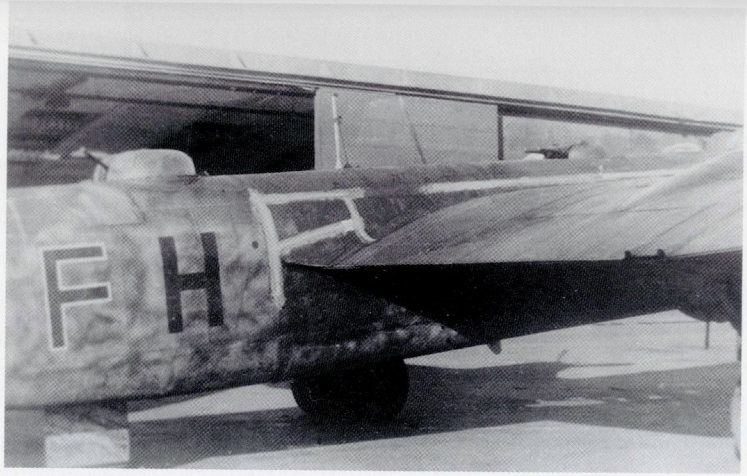
Operation Capricorn Units

Stab KG 2	Do 217	Stab KG 54	Ju 88
I./KG 2	Do 217	I./KG 54	Ju 88
II./KG 2	Ju 188	II./KG 54	Ju 88
III./KG 2	Do 217		
V./KG 2	Me 410	I./KG 66	Ju 88, Ju 188
Stab KG 6	Ju 88	Stab KG 76	Ju 88
I./KG 6	Ju 188	I./KG 76	Ju 88
II./KG 6	Ju 88		
III./KG 6	Ju 88	I./KG 100	He 177
I./KG 30	Ju 88	I./SKG 10	Fw 190
II./KG 30	Ju 88		
I./KG 40	He 177		

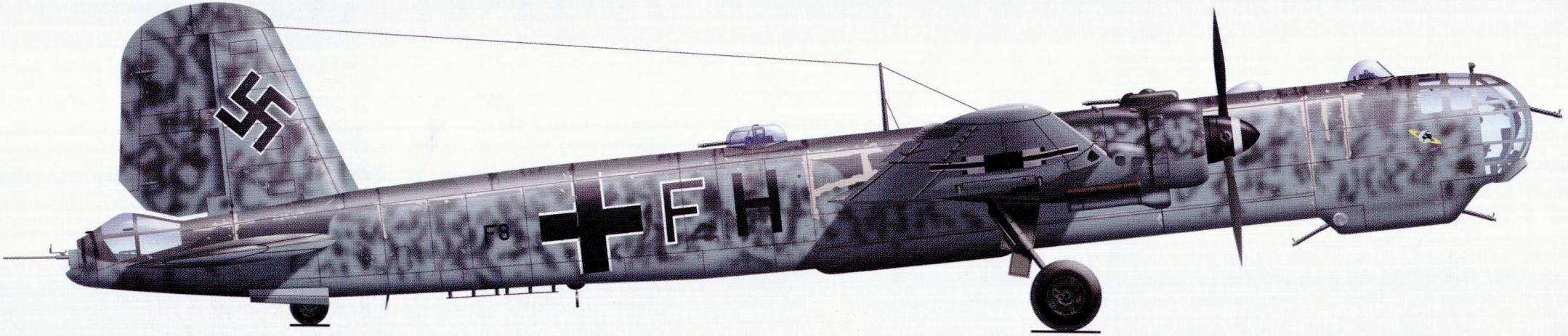


RIGHT: A Ju 188 of 10./KG 2 taxiing towards its take-off point at Villaroche loaded with four AB 250 containers, each loaded with 17 x SD 10A (10 kg - 22 lb) anti-personnel fragmentation bombs under the wings.



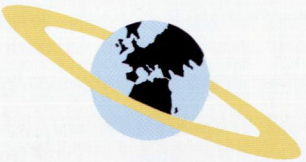


Two photographs of an He 177 A-3 of 1./KG 40, coded F8+FH stationed in Bordeaux-Merignac in the South of France during 1943. The unit code was painted in black and although the letter 'H' would normally have been painted white, here only the outline has been painted in this colour representing the Staffel. White is also the Gruppe colour which probably explains why a narrow band has been applied to the spinner. A very small KG 40 emblem has been painted very small just below the rear glazing of the cockpit. Note also that corrosion resistant paint has been applied to some of the panel joints.



Heinkel He 177 A-3 coded F8+FH of 1./KG 40, Bordeaux-Merignac, summer 1943

This machine still retains its standard factory finish and in common with many bombers at this time the unit code has been applied one sixth of the normal standard letter height. The aircraft also appears to have suffered from some corrosion along some of the fuselage joints which have been cleaned and fresh preservative paint applied. An unusual feature on this aircraft is of the KG 40 emblem painted in miniature on the nose.

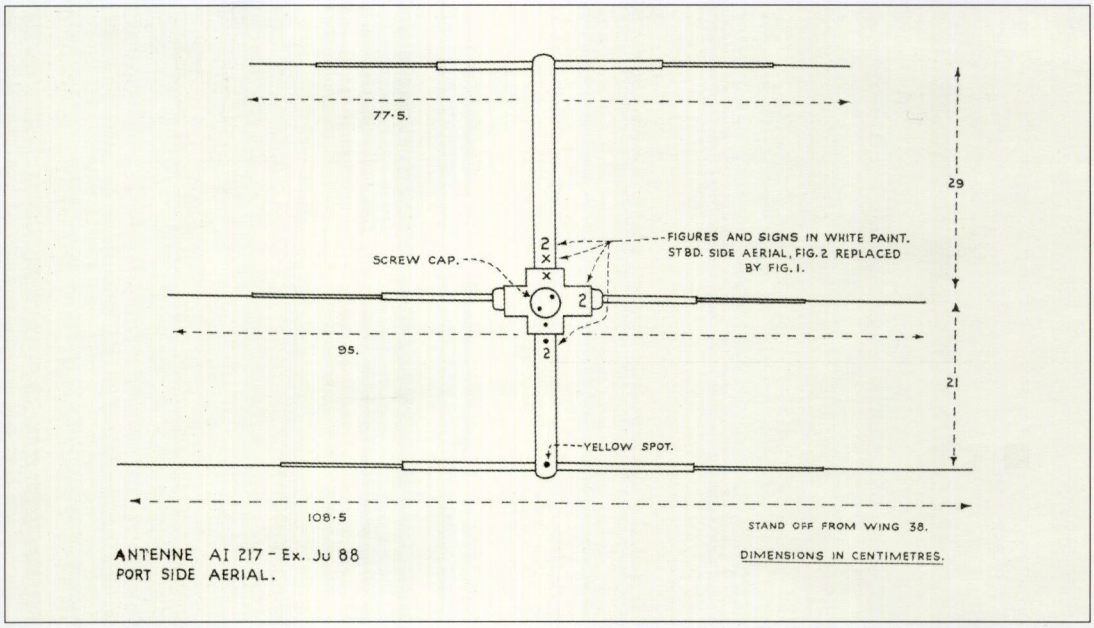


KG 40
'World in a Ring'
emblem

Summer 1943-May 1945

Rather than mount an all-out assault, the pace of operations was to be dictated by the balance of losses and replacements, maintaining strength to counter the expected Allied invasion. The small He 177 force gave the *Luftwaffe* the beginnings of the heavy bomber capability it had lacked for so long but the inventory still consisted primarily of twin-engined medium bombers. The Ju 188 was a comparatively new aircraft while the Do 217 was older but had been progressively improved. Although the cleaned-up and boosted S-model was now in service in small numbers (and treated in reports as a distinct aircraft type), the great majority of the Ju 88s were A-4s, a variant in service since 1941 when the original *Blitz* had wound down. Making up the numbers, the Me 410s and Fw 190s were fast but carried only a limited payload. To confuse the British radars, the ventral gondolas of some Ju 88s were fitted with the *Kettenhund* (watchdog) active jammer. In addition, there were bigger bombs, more powerful explosives and the FuG 216 tail-warning radar. *Oberfähnrich* Meyer, an Me 410 radio operator from 1.(F)/121 described his experiences with this equipment: '... the pilot didn't know how it worked. The first time I switched it on he said: "the damned thing is so bright. Switch it off again." ... Then he had a look at it, but he couldn't make it out.'

KG 66's pathfinders would use the *Y-Gerät* beam system (jammed by the British as long ago as February 1941); recovered British *Gee* sets and their German copy, *Truhe,* to exploit the RAF's



RIGHT: An RAF Intelligence drawing of one of the antennae for the FuG 217 tail-warning radar carried by Luftwaffe bombers and reconnaissance aircraft (in this case a Ju 88) in 1944–45. Unlike earlier FuG 214 and 216 radars in the series, these antennae were mounted above each wing, about two thirds of the way toward the tip.

own navigational aids; and EGON. The latter entailed two *Freya* radars interrogating the aircraft's FuG 25 IFF transponder to triangulate its position so that a ground controller could signal the moment to release bombs or flares. The flare patterns laid down to mark waypoints and the target itself would, it was hoped, ensure that the many inexperienced crews of the main force could still deliver concentrated attacks. The British defences had become vastly more sophisticated, especially the radars now guiding the searchlights, guns and night fighters. A Mosquito with centimetric radar was a world away from the Blenheims and A.I. Mk. II that had begun the nocturnal fight in 1940. Nor did the defenders just wait in the target area: the *Luftwaffe's* navigational aids were jammed and spoofed, intruders prowled around the bombers' aerodromes when they took off and pursued them back home again. Many of the

Oberfähnrich Meyer, 1.(F)/121 and Leutnant Schröder, 5./KG 2

Schröder: *They brought me down on my fifteenth sortie.*

Meyer: *In my case it was the second one, the second sortie over England.*

Schröder: *The AA over LONDON is terrific; it's almost impossible to get through.*

Meyer: *These prestige air raids on LONDON should never have been made. They were only to sugar the pill of the delay in the reprisals.*

PoWs 'bugged' by Combined Services Detailed Interrogation Centre

Summer 1943-May 1945

Gruppen involved in these raids remained on Dutch and German bases, staging through forward airfields in Belgium and France either to vary their approaches to London or, later, when flying against more westerly targets such as Bristol.

ABOVE: With maintenance completed this ground crew manoeuvre the Ju 88 A-5 into position. The code 9K+EP, denoted a 6./KG 51 aircraft, and had the W.Nr. 3134 painted white on the upper part of the fin. The individual letter 'E' is painted yellow.

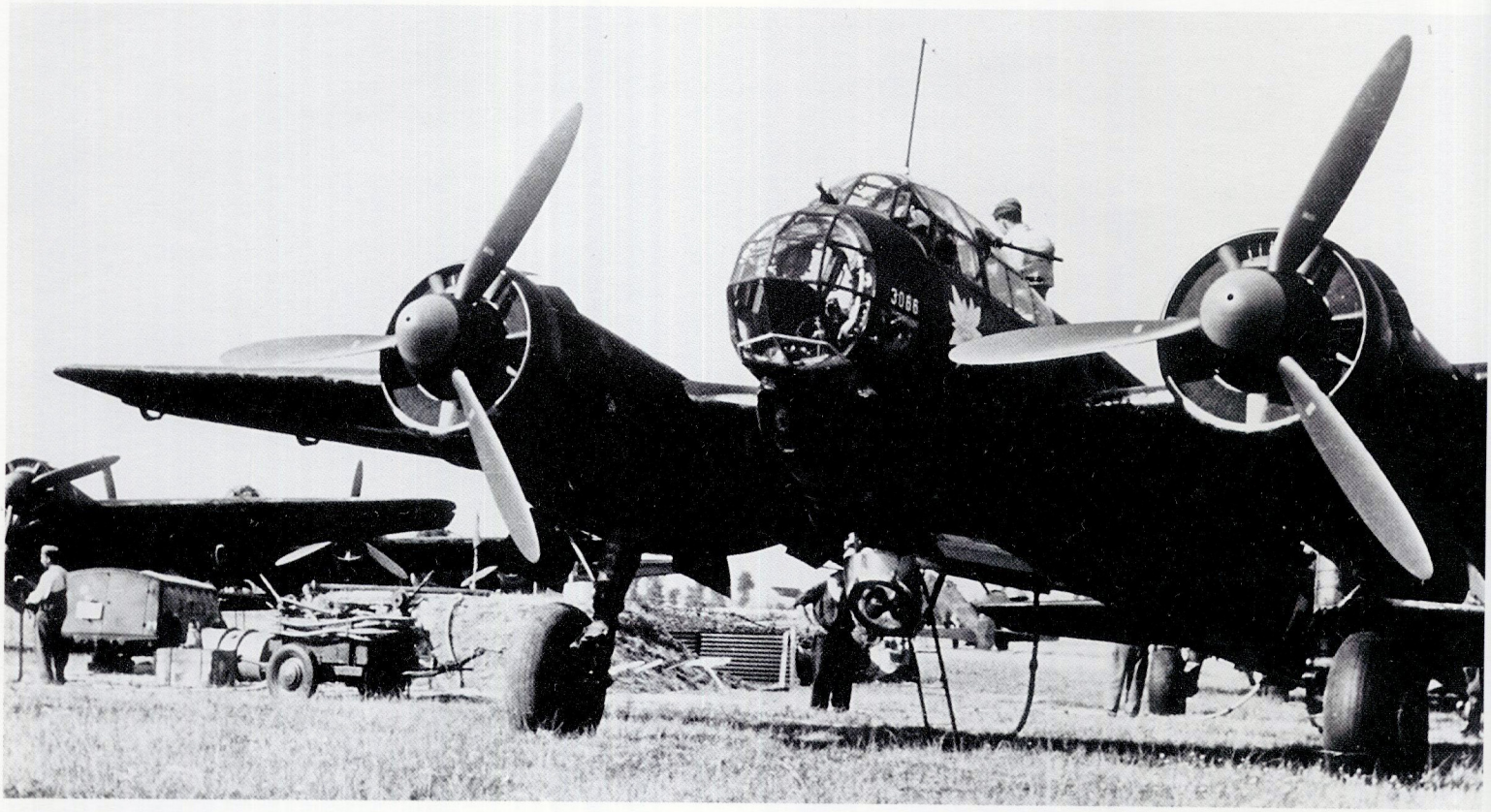
Mars

The first attack on London, *Unternehmen Mars*, came on the night of 21/22 January. Perhaps to impress the bomber crews that their mission was retaliatory, different sections of the capital were codenamed after devastated German cities — *Berlin*, *Hamburg*, *Hannover*. This first raid was aimed at *München*, the Waterloo area. The two waves amounted to just over 400 sorties and despite a line of seven white flares marking the run-in and alternate greens and whites boxing the 4 sq.km. target area, hardly any bombers reached central London, their bombs starting a great many fires throughout the Home Counties. Around 40 aircraft were lost to all causes and the RAF noted that the majority of the prisoners taken were inexperienced. Although some had operated by night over the Mediterranean, none had previously bombed London, just attended lectures about it.

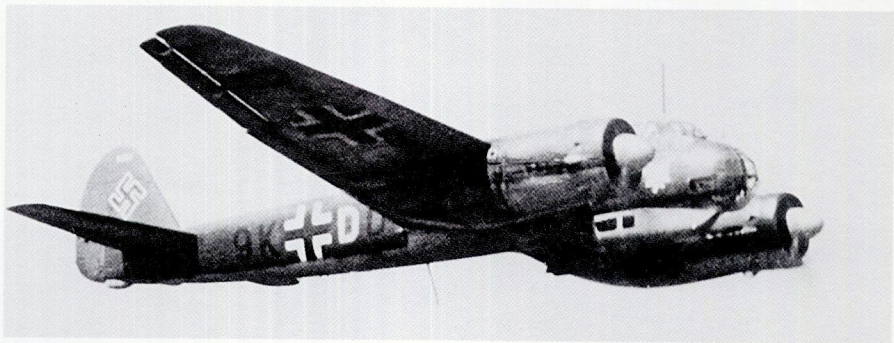
As the *Mars* force regained its airfields, the Allies were landing at Anzio, this new emergency compelling the return of three *Gruppen* to Italy. Nevertheless, it was bad weather rather than events in the Mediterranean which delayed the next London raid until 28 January and even then only the Me 410s and Fw 190s took part but the next night, a 285-strong mission was mounted, starting a major fire in the Surrey Commercial Docks.

RIGHT: A Ju 88 A-5 possibly of I./KG 51 being loaded with bombs ready for a night mission over the British Isles. It appears that a field modification has been made to the cockpit armament whereby an additional MG 17 has been installed in the side window, possibly on each side, to the rear of the cockpit. The aircraft carries the 'Edelweiß' emblem of KG 51 on the nose and the undersurfaces have been painted black for night operations. The spinner tips are painted white which may indicate the I. Gruppe colour.

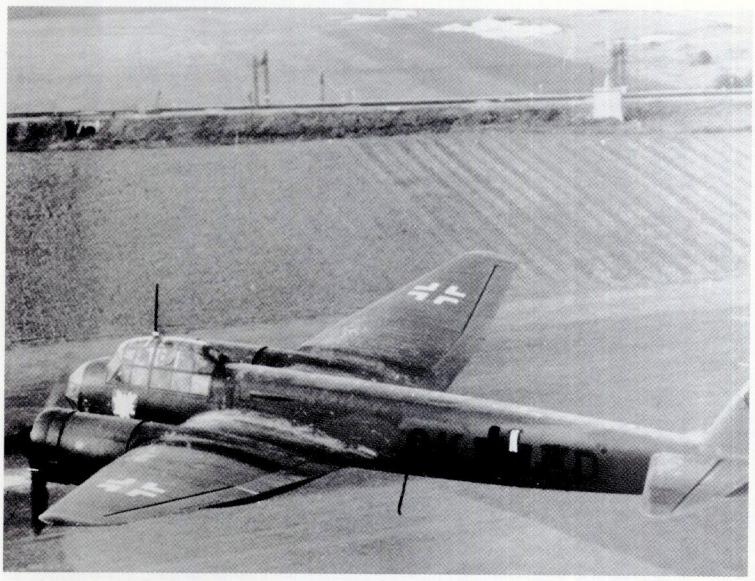
Summer 1943-May 1945



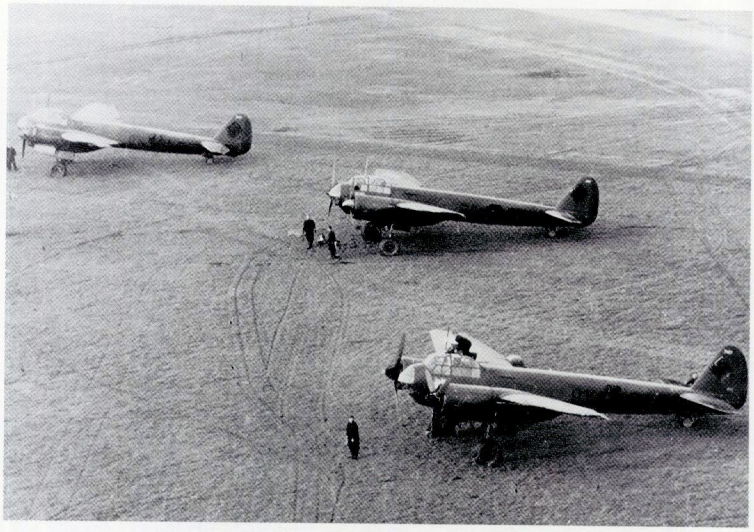
RIGHT: By contrast to the previous photographs this Ju 88 A-4 coded 9K+DU belonging to 10./KG 51, still carries standard factory camouflage. The individual letter 'D' is applied in white and the spinner tips are painted blue in the IV. Gruppe colour.



ABOVE: Several Ju 88 A-4s of KG 51 being made ready for a mission. The machines are possibly II. Gruppe aircraft as they have red tips to their spinners. The Ju 88 in the foreground is W.Nr. 3066 and also has the cockpit armament modification of MG 17s being fitted to the side glazing panels at the rear of the cockpit.



ABOVE: A Ju 88 A-4 of the Stab III./KG 51 flying low over the French countryside on its way to England. The aircraft carries the code 9K+ED and has had the underside and national markings painted out in black.



ABOVE: Three Ju 88 A-4s of KG 51 stand ready for action. The aircraft in the centre and furthest away, are coded 9K+BR, W.Nr. 6147 and 9K+LR respectively indicating aircraft belonging to 7. Staffel. The Ju 88 A-4 nearest the camera is coded 9K+CP, W.Nr. 7082 but has been painted out in black, the standard finish for night operations.

The composition of Peltz's front line was never static. In February, elements of I./KG 2 were pulled out for conversion to the Ju 188 and V./KG 2 to become the new II./KG 51, returning to action late in March. *Stab* and I./KG 51 were brought in and 1./KG 40 was withdrawn to Germany to refit. The first major attack of the month came on the night of 4/5 February, failing to achieve concentration but costing 15 aircraft. Things went little better with the next operation but on 18/19 and 20/21 February, the 200 bombers dispatched each night caused damage assessed by the British authorities as the worst since 1941: a total of almost 400 dead, over 1,000 fires started and widespread damage to the rail network. There were three more large attacks on London before the end of the month. Although more destruction was now being achieved, the first of the big February raids had involved 237 aircraft while for the last two, totals had sunk to 161 and 170 respectively: the force, which was supposed to have been conserved was dwindling.

The main force's operations were interspersed with continual harassing of the capital by the Me 410s and Fw 190s, rather as Bomber Command's Mosquito force was doing over Germany's cities. In fact *Steinbock* coincided with some of the biggest and most costly RAF area attacks on the *Reich*, each side crisscrossing the sky on diversionary routes, emitting and jamming navigational signals, sowing route markers and target indicators and sending intruders to disrupt their adversaries' efforts. The RAF however could deliver massively greater tonnages of bombs and its capabilities had improved enormously since its first ventures over Germany whereas the *Luftwaffe's* bombers could no longer produce a consistent performance. Perhaps this was because, as an RAF intelligence report of 9 March noted, '...many of the bomber aircraft which have operated over London in recent raids have not been fitted with bomb sights.'

Prisoners explained that those with a sight usually aimed at the target indicator flares, those without 'by rule of thumb.' The *Kampfflieger* were prone, like their RAF counterparts, to 'creepback' as successive crews bombed the nearest edge of the fires started by their predecessors and (understandably) turned for home as soon as possible. For Londoners, this was 'The Little Blitz': hundreds died, thousands were injured and thousands of homes were wrecked. Wearied by over four years of war, they were said to be more nervous, less defiant and not so self-reliant as in 1940–41 but all the Germans got was the satisfaction of hitting back. The British people did not rise up and demand peace, and the war effort was scarcely impeded.

New targets

During March, 3./KG 2 was withdrawn for conversion to the Ju 188 and 3./KG 66 disbanded; *Stab*, II. and III./KG 30 were brought in but the last of these was soon pulled out again along with II. and III./KG 6, to support the occupation of Hungary. By the middle of the month, Peltz had 232 serviceable aircraft in his operational units. For the London raid on the 1st/2nd, KG 2's aircraft took an indirect route from bases in Brittany and over Guernsey to approach their target from the southwest. For almost two weeks afterward, only nuisance raids were mounted while the main force's strength was rebuilt somewhat, 187 bombers returning to the British capital on the night of 14/15 March. Five nights later, the target was Hull, missed completely with bombs scattered over Norfolk and Lincolnshire. The *Kapitän* of 2./KG 66, *Hptm.* Schmidt was lost on this mission. A further attack on London on 21/22 March started a 50-pump fire in Islington; four nights later, 70 pumps were needed to fight the fires in West Norwood, another 56 in Fleet Street and 28 more in Croydon. Not only bombs were deadly: in the early hours of 25 March, a Ju 88 A-4 of 9./KG 6 crashed on No. 199 Redbridge Road, Ilford, setting the house on fire and killing three occupants as well as its own crew of four. The last raid of the month, on the 27/28th, missed Bristol Docks entirely but cost Peltz another 13 aircraft.

BELOW:
A Ju 88 A-4 revs up its engines somewhere in France under the watchful eyes of the ground crew.

As March ended, III./KG 54 arrived from Manching in Bavaria while the II. *Gruppe* was pulled out of the line. On 25 April, orders were issued that the *Staffeln* of the latter would become the new 3., 4. and 5./KG 66. Meanwhile, the old 3. and 4./KG 66 were renamed 6.(F)/123 and *Ergänzungsstaffel* I./KG 66. On 8 April, the USAAF bombed KG 2's airfields, destroying 14 aircraft and damaging seven while next day, fighter bombers burned out another four Ju 188s. The main force did not return to London until the 18/19th and if this operation was at best a partial success, attempts to bomb Hull (20/21 April) and Bristol Docks (23/24 April) were complete failures.

Ports and sea lanes

Revenge attacks now gave way to disruption of the impending Allied invasion of France. It has often been asserted that the *Luftwaffe* could get no photographic coverage of Britain in the run-up to D-Day but an Me 410 of 1.(F)/121 flew over Portsmouth photographing 200 ships and a mass of landing craft, resulting in a sequence of four attacks starting on the 25/26th when two waves totalling 233 aircraft were dispatched. On the next three nights, the forces withered to 78, 60 and 58 aircraft respectively. Shipping proved a difficult target and so the final mission sowed BM 1000 mines rather than bombs. The Do 217s of III./KG 100 joined a 101-strong attack on Plymouth on 29/30 April, steering their *Fritz-X* bombs toward warships in the Devonport Dockyard. This was the last raid on the shattered city, the one use of the guided weapon against the British Isles and a rare attempt to employ it by the light of flares, rather than at dusk. The attack was thwarted by smoke screens and the *Gruppenkommandeur, Hptm.* Pfeffer, was among those lost.

In May there were further changes to the force's composition with the return of I./KG 6 and I./KG 2 while 1. and 2./KG 40 (He 177) and 6./KG 76 (Ju 88) were brought in. On the debit side, III./KG 6 and I./KG 100 were withdrawn for rest and re-equip; III./KG 30 was disbanded and from the 24th, I./KG 51 was withdrawn from Dreux and St. André to Southern Germany. The first IX. *Fl.Kps.* operation was on the night of the 14/15th with 91 aircraft sent to raid Bristol. The force's strength was reduced by 15 early on when RAF intruders attacked the bases of KG 2, KG 54 and KG 51. The resulting delay prompted *Luftflotte* 3 to order a 15-strong nuisance operation against coastal towns between Portland and Bournemouth. The first wave — eight Fw 190s of I./SKG 210, each with a 500 kg bomb — took off at 20.30. Shortly after 21.00 hrs, three aircraft hit Bournemouth, one Weymouth, one Poole, another an airfield between Portland and Poole while one aborted. Three Fw 190s of the second wave struck Bournemouth at 22.00 hrs and an hour later the third wave set off — two Ju 88s with three 500 kg bombs apiece. At 00.35 hrs, Bournemouth was bombed yet again despite a decoy fire to the west of the town while the other Junkers attacked a lighted airfield 10–20 km northeast of Dorchester. There were no losses.

Five Ju 88 S and two Ju 188 pathfinders were over the primary target from 23.52–00.52 at 8,000–6,000 m. From 23.50–00.05 hrs, five Me 410s flew over at similar altitude to conceal the pathfinder operation. The main attack consisted of 56 aircraft: seven Do 217s, 22 Ju 88s and 27 Ju 188s. Two Ju 188s which failed to find the primary attacked an airfield west of Bristol and a Do 217 with engine damage bombed Portland while two more that had encountered night fighters attacked 'not clearly identified targets' on the south coast. Searchlight sites were bombed by two Ju 188s and two Ju 88s, three of which had suffered engine damage, technical problems or been dazzled by searchlights; the fourth had been attacked by night fighters. All the attackers used *Düppel* to spoof British radars but the RAF's fighters had been encountered over Vannes airfield as the bombers took off, between the English coast and the target and on the homeward leg as far as Guernsey. Searchlights had been very active from the coast to the target but AA fire over Bristol was judged only moderate. Eleven aircraft were missing: a Ju 188 of I./KG 2, three Do 217s of III./KG 2, four Ju 188s from I./KG 6, including that of the *Kapitän* of 1. *Staffel*, two Ju 88s from II./KG 30 and a Ju 88 of I./KG 54.

In addition, the crew of a I./KG 6 Ju 88 had baled out near Valognes after being shot up by a night fighter and another Ju 88 had been destroyed near Avranches after aborting with engine failure. On top of that, four Ju 188s had broken off with engine damage plus three Ju 188s, four Ju 88s, a Ju 88 S and an Me 410 with technical trouble. Not only had the loss rate been 16.5% of the aircraft dispatched but the raid itself had failed: British jamming of navigational aids had made the pathfinders late, their flares dropping about 15 km north of the target and leaving the main force to bomb by straight navigation.

From 20.20 hrs the next night, 106 bombers took off against Portsmouth. A Ju 88 S and a Ju 188 each dropped six flare buoys to mark the coast crossing point. With five more Ju 88 S's and two Ju 188s, they were over the target from 22.30–22.48 hrs, dropping 68 target indicators as well as bombs. Nine Me 410s and 12 Fw 190s also bombed the town as cover for the pathfinders' activities. The main attack was carried out by three Do 217s, 34 Ju 88s and 32 Ju 188s

Luftflotte 3 appreciation of operations on 14/15 May 1944

Dark night attacks can only be successful if faultless pathfinder operations are guaranteed. Present procedure can no longer be used with certainty owing extensive and effective Allied jamming. Further attacks on Bristol Channel targets, which are difficult from weather point of view, only promise success insofar as Allied jamming can be overcome in adequate light conditions, that is in moonlight, in which cases still higher losses must be borne.

IX. Fliegerkorps assessment of operations on 15/16 May 1944

Weather conditions worse than expected, 9/10ths cloud over target, cloud base varied greatly, 2,400–4,500 ft. First target illumination was six minutes late. Jamming … made it impossible to give timely orders to pathfinders. Sea marking was correct (time and place) but seen only by a few crews flying below cloud. Until first markers went down, formations bombed main concentration of AA over target, being guided mainly by AA in the Isle of Wight and Southampton. Main concentration of defensive [sic] was recognised with certainty. From reports of a few crews of KG 2 and KG 6 flying below cloud, also one pathfinder, about 50% of bombs considered to have fallen in target area. This was established by wireless and straight navigation and in part by observation. Concentrated bombing could not be established.

from only 3,500–1,000 m and all used *Düppel*. They dropped six SC 1000 *Trialen*, 29 x SC 1000, 39 x SC 500 *Trialen* and 250 x SC 50 bombs as well as 69 x BM 1000 mines. Thick cloud made damage reports sketchy and prevented the assigned reconnaissance Ju 188 from getting any photographs.

The bombers reported numerous night fighter attacks; off the coast, heavy AA came up from ships and over the Isle of Wight and Portsmouth itself there was strong AA of all calibres. Crews reported that the guns were supplemented by anti-aircraft rockets, 'deterrent devices', barrage balloons and decoy fires. Two Ju 188s, a Do 217 and a Fw 190 aborted with engine damage; a Ju 188 and two Fw 190s broke off with technical trouble and a Ju 88 S turned back after being shot up by a night fighter. One Ju 188 of I./KG 2, a Do 217 from III./KG 2, two Ju 188s of I./KG 6 and two Ju 88s from III./KG 54 were posted missing.

After a sequence of nuisance raids, 104 bombers returned to Portsmouth on 22/23 May, losing ten of their number, including KG 2's *Kommodore*, *Maj.* Wilhelm Rath. Five nights later, a smaller operation was mounted against Weymouth and to mine the adjacent waters; on the 28/29th a similar effort was made against Torquay while the next night's target was Falmouth with a diversionary assault on Portsmouth by I./SKG 10. By 24 May, I./KG 76 still had 42 crews (ten of them operationally ready) but was down to just five Ju 88s, two of which were serviceable.

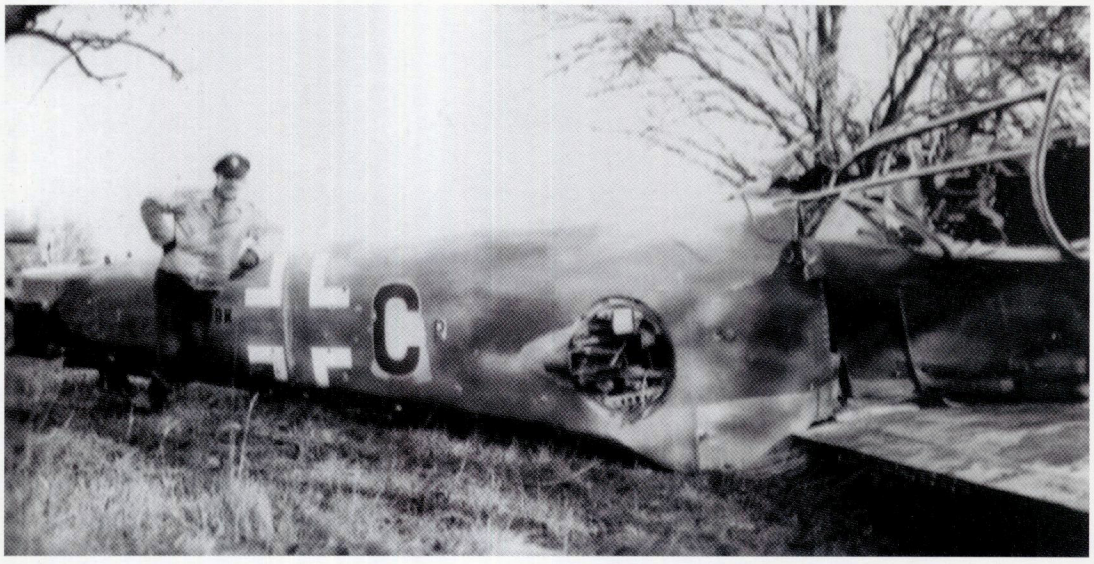
BELOW: A Do 217 E-4 coded U5+KL of 3./KG 2 being re-fuelled prior to a mission. The individual aircraft letter 'K' is painted yellow in the Staffel colour. The aircraft appears fairly new and still carries the standard factory finish.

Summer 1943-May 1945

Intruders

Since 31 March, the Me 410s of II./KG 51 had again been active over the bomber bases of eastern England. Airfields were strafed and bombed, individual bombers, often with crews under training, were surprised and shot down. On the night of 11/12 April, ten Me 410s came in on the coat tails of RAF bombers returning from a raid, and brought down a B-17, a Spitfire, a Stirling and a Mosquito. A similar operation was mounted on the 18th but II./KG 51's best known intruder mission came four nights later. The US Eighth Air Force bombed the marshalling yards at Hamm, Northwest Germany on the evening of the 22nd and returned in darkness. The 2nd Bomb Division's B-24s were followed home by the *Gruppe's* Me 410s which wrought havoc over East Anglia, shooting down or forcing to crash land 14 Liberators and an RAF Albemarle. The II./KG 51 suffered its first two intruder losses, one being *Gruppenkommandeur, Maj.* Dietrich Puttfarken. Over the coming nights, there were more successes, on a smaller scale, and more losses.

On the night of 12/13 May, seven Me 410s were up intruding south of the Wash and north of the Humber after midnight. One attacked two aircraft, near Kettering and Wyton respectively. Another fired on a machine near Bury St Edmunds and dropped 34 x 10 kg bombs on an 'unidentified target', while other Messerschmitts bombed Norfolk and the Cambridge area. In the first minutes of the 22nd, ten Me 410s



RIGHT: An American officer leans on the bullet-riddled fuselage of an Me 410 night intruder, 9K+CP of 6./KG 51. The aircraft letter 'C' is in black with a yellow outline and is the only large character in the code. This style of marking was carried over on to KG 51's Me 262s. From the areas of overpainting, it appears as if this machine may previously have been marked 9K+AN. Upper surface camouflage appears to be a heavy mottle of greys 74 and 75. Undersurfaces are possibly RLM 22 black, but no attempt has been made to tone down the white outline Balkenkreuz for night operations.

took off from Soesterberg for East Anglia. *Luftflotte* 3 reported that nine had attacked, claiming three Lancasters, all of which were seen to catch fire on crashing. Another eight four-engined aircraft had been 'effectively shot up.' Subsequently, *Fw.* Trenke of 6./KG 51 was credited with the three Lancasters and *Uffz.* Baier of the same *Staffel* with destruction of two Liberators. In addition, eight SD 70 canisters had been dropped from 400 m on an illuminated airfield and two AB 250s, each filled with 17 x SD 10 bomblets, on another airfield where landings were in progress. In neither case had any results been observed. The next night, eight Me 410s returned to the same area, claiming four four-engined aircraft shot up. Bombs were dropped on an airfield east of Cambridge; on lights nearby; on an AA position between March and Littleport and on three further runways. The IX. *Fliegerkorps*' verdict was that the operation was 'correct in time and place but hindered by bad visibility, low cloud base and local showers. Nevertheless, harassing effect achieved.'

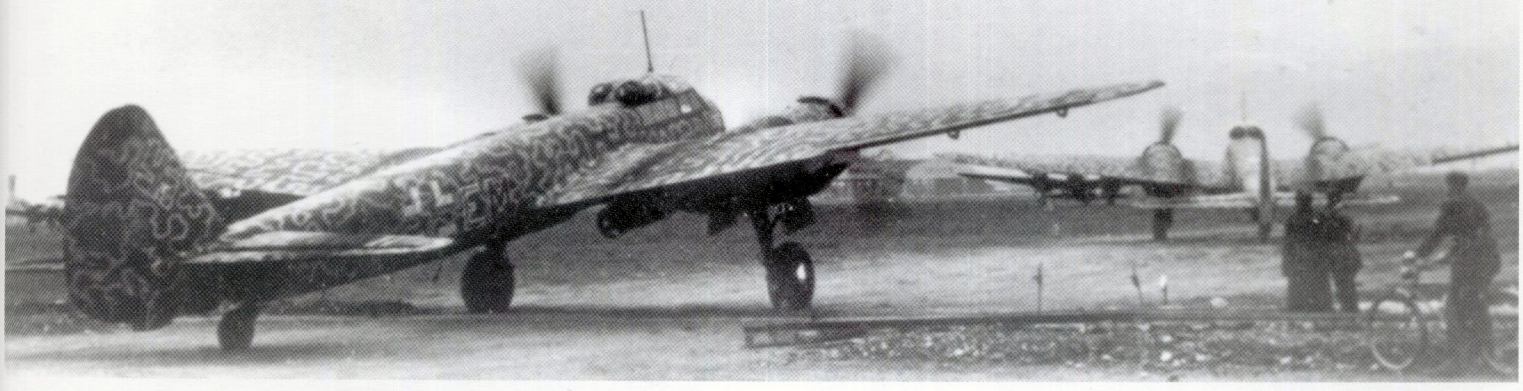
Twelve machines were assigned to intruder patrols over East Anglia during the night of 28/29 May but two collided during take off. Others went on to bomb airfields and a 6./KG 51 crew claimed a Stirling. Missions over England continued until the end of July but increasingly II./KG 51's efforts came to be directed against Allied troops, traffic and supplies in France. Among the casualties were 9K+FN and 9K+BP, both of which belly landed at St. André in the early hours of 16 June. On 14 August, with the German position in Normandy disintegrating, the *Gruppe* was ordered to transfer to Schwäbisch Hall where it would convert to the Me 262.

Luftflotte 3 appreciation of operations on 14/15 May 1944

Dark night attacks can only be successful if faultless pathfinder operations are guaranteed. Present procedure can no longer be used with certainty owing extensive and effective Allied jamming. Further attacks on Bristol Channel targets, which are difficult from weather point of view, only promise success insofar as Allied jamming can be overcome in adequate light conditions, that is in moonlight, in which cases still higher losses must be borne.

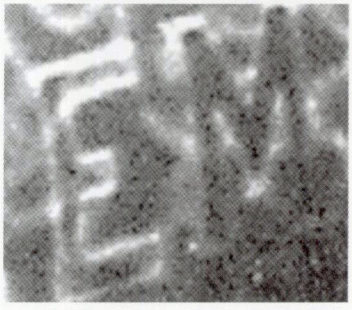
Italy: January–June 1944

BELOW: Three ground personnel watch as bombed-up Ju 88s taxi out for an operation over Italy. The nearest aircraft, 'EM' carries its full complement of late war crosses in white outline form. The densely applied meander overlaps the crosses, but no attempt has been made to obscure them entirely. No unit code is visible and so 'EM' could belong to II./KG 30, II./KG 54, II./KG 76 or II./LG1, all of which served in Italy during this period. Interestingly, the rear guns do not seem to have been installed in their lens mountings. Soon it would be rare to find an intact hangar, such as the one just visible between the two nearest aircraft, on a Luftwaffe base in Italy.

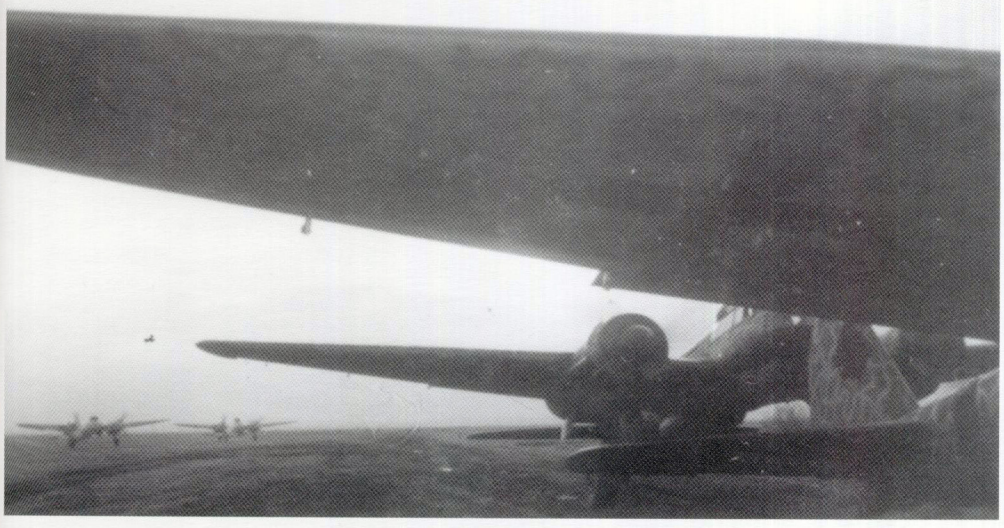


Anzio-Nettuno

An Anglo-American force came ashore at Anzio and Nettuno, south of Rome on 22 January 1944 and groups of *Luftwaffe* bombers estimated at 50–60 strong attacked on 23, 24, 26 and 28 January. On the 26th, USAAF fighters from Corsica intercepted an incoming raid, claiming 6-0-1 and forcing most of the others to jettison their glide bombs and turn back. Only three got through to Anzio, where one sank a cruiser. The other successes in this phase of operations, which ceased after the 29th, were a destroyer, two Liberty Ships and a hospital ship sunk.



ABOVE: This computer-enhanced detail of the top photograph shows that the individual aircraft code letter 'E' consists of just a white outline on the dark green base camouflage, while the 'M' of the 4. Staffel is black. The pale blue or grey meander crosses both letters.



ABOVE: Four Ju 88 A-4s, bombed-up and taxiing out for an operation against Allied forces in Italy. They have a pale blue or grey meander pattern finely applied over their upper surfaces and a dark grey or black meander over their blue 65 undersides. National markings on fuselage and fin have been blacked out and no unit code is visible. The fuselage band of the aircraft in the foreground has also been painted black: it may originally have been white to denote service in the Mediterranean. Only the black centre of the underwing cross remains.

ABOVE: This computer-enhanced detail of the photograph left shows how the dark meander pattern avoids the all-black underwing Balkenkreuz.

Summer 1943-May 1945

From 22–31 January, the Allies noted that the following bomber *Gruppen* were transferred to Italy in response to the landings.

Bomber *Gruppen* transferred to Italy 22-31 January 1944

From	Units	Aircraft
Greece	I. and III./LG 1	45
Western Front	II. and III./KG 30	40
	I./KG 76	15
Southern France	II./KG 100	5
Refitting	I./KG 30	15
	II./KG 76	15
During the following week: 'another *Gruppe*' returned to Italy		5
	Total	150

Twenty Ju 88s of I. and III./LG 1 arrived in Aviano on the morning of the 23rd; en route they had landed at Belgrade-Semlin, against orders. That afternoon, Spitfires of the US 2nd FS were on their way to bomb the Viareggio E-Boat base when they met KG 26 headed for Anzio. Lieutenant Robert H. Liebl downed a Ju 88 'painted dark gray with dark wavy streaks' and saw four more aircraft burning on the water whereas the *Luftwaffe* station at Lucca reported that a mixed formation of He 111s and Ju 88s had been attacked by 'four British fighters' with two Heinkels and Junkers lost. At 15.14 hrs next day, British codebreakers issued a maximum priority signal:

> *'German Navy gave warning at 12 hrs [GMT] 24th that fairly large formations various types would fly low that afternoon and towards evening [on] route Marseille – Livorno and on to Nettuno. If cloudless, via Siena, if overcast via Elba and Civitavecchia.'*

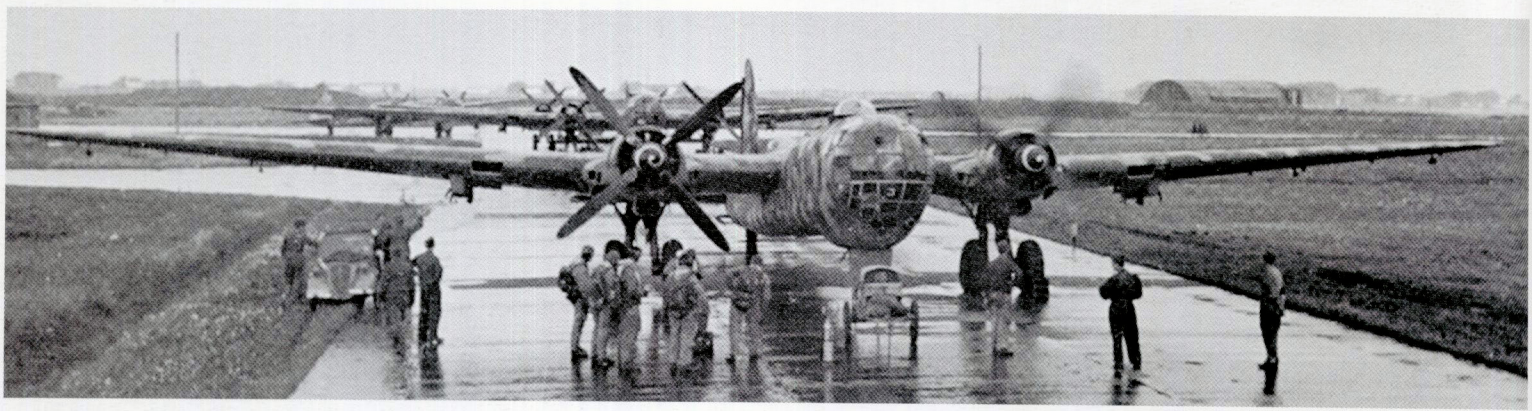
Just 80 minutes later, six 2nd FS Spitfires intercepted two *Ketten* of Do 217s heading south on the deck and a mile offshore. Their camouflage was described as 'blue gray, similar to a Spitfire' and 'two-toned gray.' The Dorniers held formation and returned fire, forcing Lt. Clyde Cleveland to bale out but not before he had shot one of them down.

On both the 23rd and 24th January, He 177s of II./KG 40 had left Bordeaux-Mérignac during the afternoon on a four-hour flight to Anzio-Nettuno. Cruising at 300 km/h, their route took them over Avignon to the Gulf of Genoa and then overland down the Italian peninsula. On the first evening, two were shot down by Beaufighters off Corsica while returning home; on the next an He 177 loaded with flares was only a few miles from its target when its port engines were set on fire by another Beaufighter and the crew baled out. Although the He 177 had a troubled development history and has received a bad press from historians, prisoners from these particular machines spoke highly of them. High altitude performance was good, with speeds of 600–650 km/h 'easily attained'; the He 177 A-3 was rated 'more manoeuvrable than any other GAF bomber' and:

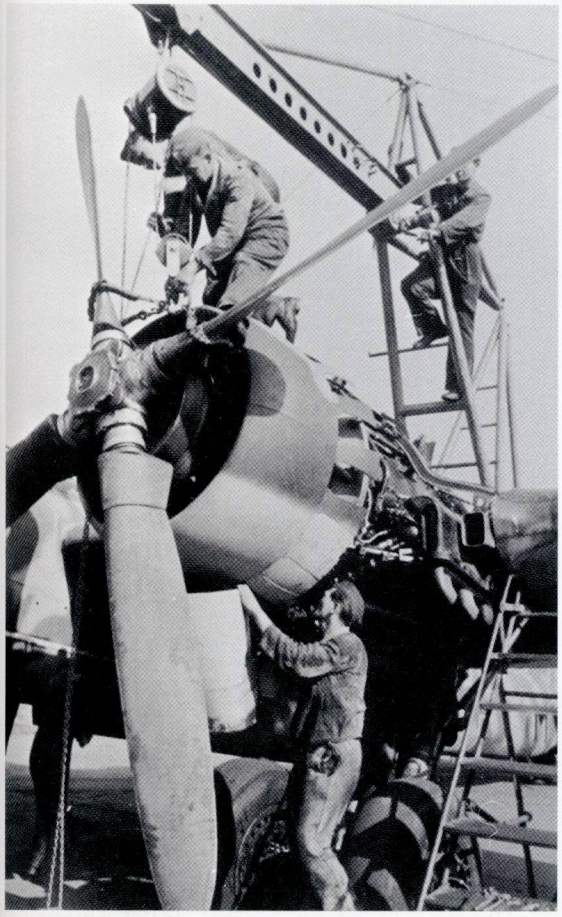
> *'Both crews are most enthusiastic about the engines, which appear to function smoothly and efficiently over incredibly long journeys. The disengaging [to save fuel] and re-engaging of the motors now takes place without any risk of fire, a tendency known to have been rife when the motors were first used.'*

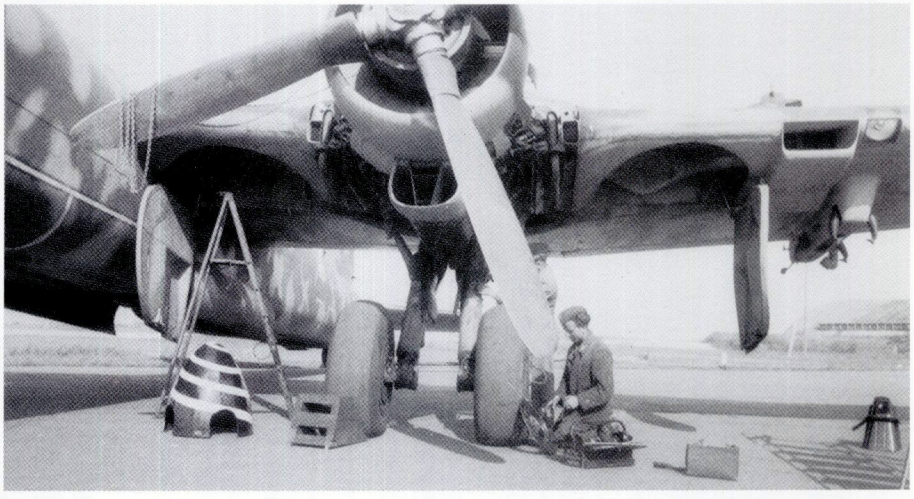
However, a number of 4. *Staffel* crews were said to have been killed by the structural weakness in the wing roots, leaving the wings liable to fold up in a 40–50 degree dive.

BELOW AND OPPOSITE TOP: About this time II./KG 40 had been re-equipped with the He 177 A-5 and stationed in France at Bordeaux-Merignac. These two views show crews preparing for a mission although no weapons have been installed under the wings. These aircraft were fitted with bomb racks to carry either the Fritz X (FX 1400) guided bomb or the Henschel Hs 293 air to surface missile.

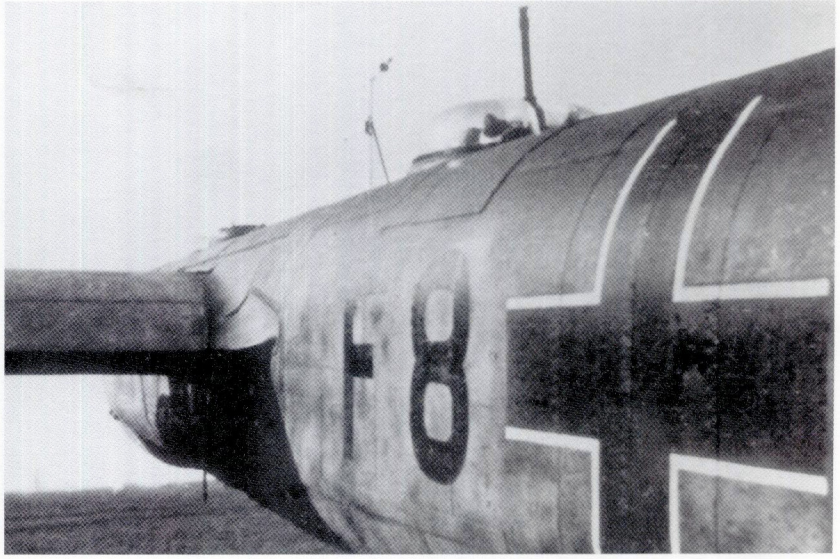


BELOW: Using a special crane the engine mechanics manoeuvre the huge propeller into position. The DB 610 engines were particularly prone to overheating and often caught fire, which meant constant servicing inspections.





ABOVE: With a new propeller fitted it just remains for the spinner to be re-installed and some final checks to be made before the engine can be tested.



RIGHT: A view along the fuselage of an He 177 A-5 of KG 40 clearly showing the unit code F8 and B2 position gun turret consisting of a single MG 131 machine gun.

Summer 1943-May 1945

ULTRA decrypt VL 4999

According to Fliegerführer Luftflotte 2, evening 27 January: the landing fleet and unloading operations were attacked during the night of the 26/27th by 107 heavy bombers. Effect of attack assumed to be considerably in excess of claims as details not observed owing to darkness, dazzling by searchlights and defence by AA and night fighters.

Intelligence on LG 1: February 1944

By 2nd, Kommodore of LG 1 had ordered that living quarters of an unspecified Gruppe could be retained as return could be counted on as a certainty after elimination of beach head.

Crews of II./LG 1 on 2nd: 5 fully ready out of 41.

Luftflotte 2 orders … for night 8/9th … LG 1: harassing attacks with single aircraft, according to weather conditions, on Allied concentrations in beach head. Bomb load: small splinter bombs.

II., III. and IV./LG 1 warned on 9th to beware of fighters east and south east of Aviano during midday period. Comment: … fighter flights possibly by I./JG 53.

Crews of II./LG 1 on 13th: 3 fully ready out of 40.

ULTRA decrypts
VL 5462, 6233, 5844, 5965 & 6245

The I. and II./KG 30 were operating on the night of 24/25 January, Ju 88s 4D+ML and 4D+GM crashing around 04.00 hrs on the 25th near their base at Villafranca. The next night, 12 Ju 88s of III./KG 26, led by *Oblt.* Werner Konrad, *Staffelführer* of 9./KG 26, launched their torpedoes against ships off Anzio-Nettuno. Konrad's aircraft fell to light AA and he told his captors that the *Geschwader* had lost at least ten crews in operations against the landings but hit only one destroyer and a merchant vessel.

During the evening of 29 January, a Beaufighter of No. 600 Squadron intercepted a group of four Do 217s off Anzio and, despite one of them getting on its tail, managed to damage one Dornier and destroy a second. On 30 January, German bomber airfields in Northern Italy were raided and the occupants took off to avoid being destroyed on the ground, one group getting caught at low level by P-47s which claimed 36 for two losses. The Allies believed that in all they destroyed 68 German aircraft that day; the Germans reported 'numerous aircraft' damaged by splinters at Villaorba. Coincidentally or otherwise, I./KG 76 had been ordered by *Ob.d.L* to transfer to this airfield with key personnel and was expected to have moved in by the 30th. During February, the bomber units from France would sometimes stage through airfields in north Italy. On the 5th, a Do 217 of 5./KG 100 crashed in transit between Bergamo and Toulouse-Francazal; three days later, nine Dorniers arrived in Bergamo from Bordeaux and aircraft from I. and III./KG 26 were active between Salon-la-Jasse and Piacenza over a period of several days. Off Anzio on 15 February, the *MV Elihu Yale* was bombed, set afire and beached. On the night of the 17/18th, 39 Ju 88s attacked 'clearly distinguished ground targets' south of Campo di Carne, losing three of their number. Bombing next morning by three He 111s near Caporetto in Northeast Italy was possibly anti-partisan activity by *Flugbereitschaft Luftflotte* 2.

LEFT: Two bomber Kommodores in the Mediterranean theatre in 1944. Oberstleutnant Rudolf von Hallensleben (left) led KG 76 and, from autumn 1944 to March 1945, a Gefechtsverband of bombing and night-attack units on the Western Front. Oberstleutnant Joachim Helbig (right) commanded LG 1 and, in 1945 a Gefechtsverband operating against Soviet-held bridges over the Oder and other rivers on the Eastern Front.

It was around this period that all the bombers in Italy were put under the tactical command of *Gefechtsverband* Helbig, a staff led by LG 1's *Kommodore*, *Obstlt.* Joachim Helbig who addressed his assembled aircrews at Piacenza on 17 February. During March, captured (and evidently disenchanted) bomber crews led their interrogators to conclude that Helbig: '...applies threats in the same manner as ... Galland and Goering in July, 1943, threatening with Courts Martial and Courts of Inquiry, all pilots who return without accomplishing the mission they embark on, and also those who return without a very good reason. Engine failure is accepted ... icing is not ... Due to these harsh regulations pilots are continually reporting sick, and it is also stated that of those who do take off, hardly more than 40% reach their targets.'

Bomber Units of *Luftflotte* 2

	7 March 1944		10 May 1944	
Unit	**Aircraft**	**Crews**	**Aircraft**	**Base**
Stab LG 1	1 (0)	?	1 (1)	Ghedi
I./LG 1	19 (11)	27 (20)	23 (18)	Ghedi
II./LG 1	29 (23)	40 (8)	27 (24)	Villafranca
III./LG 1	16 (13)	6 (4)	—	—
Stab KG 76	2 (1)	3 (0)	1 (1)	Ronchi
I./KG 76	23 (14)	26 (16)	—	—
II./KG 76	21 (9)	32 (7)	—	—
5./KG 76	—	—	9 (6)	Aviano
III./KG 76	—	—	26 (18)	Aviano

LEFT: Fitted with FuG 200 radar fitted to its nose this Ju 88 A-6, W.Nr. 4198 was operated by LG 1 from Aviano in northern Italy during spring 1944. The machine still carries the factory call sign PN+MT, although a white theatre band has been applied as well the scribble spray applied in RLM 65 as used effectively for aircraft flying over water.

Corsica

The night after the disastrous attack on Convoy UGS 40, the *Luftwaffe* in Italy chalked up what *General der Flieger* Max von Pohl recalled as: '... one of its last genuine successes [when] bombers, led by Oberst Helbig, caused havoc among closely parked Allied mediums during a surprise night attack on Corsican airfields.'

At 21.05 GMT on 12 May, British codebreakers issued a ZZZZZ (maximum priority) signal:

'Bomber formation taking off Udine 18 hrs [GMT]/12th via Bologna. Return flight between Genoa and Spezia to Udine 21.30. Bomber formation taking off Udine 00.20 hrs via (strong indications Forli). Return via Arezzo to Udine 04.20 hrs/12th.'

Some 115 bombers carried out 'two concentrated attacks' on the Corsican airfields of Borgo-Poretto and Alesani. The US 488th Bomb Squadron [3] was among those on the receiving end:

> *'...about 2300 hours, there was quite a bit of fireworks up Bastia way... About 0300 there was a new alarm and those who bothered to get out of their sacks saw and heard plenty of display. The noise and illumination rose to a peak and seemed to move down the coast toward us, then died out. A few minutes later without a bit of warning, three chandelier flares burst right over our heads. Simultaneously, all the guns ... put up a curtain barrage. The flares blossomed right over the dispersal area and could not have been more perfectly placed. The place was lighted bright as midday. From then on thing happened fast and furiously... The Jerry planes... had a field day since one of their first hits had been the command post of the radar and gun control ...[they] jazzed back and forth ... right over our heads — we could see them in the faint moonlight. They'd come over the hill in a fast dive practically on the deck, rake the areas with anti-personnel bombs and machine gun fire. ...the ground shook as their bombs hit our loaded ships and fuel drums and ... bomb dumps went up. One ship ... fully loaded for the morning's mission simply disappeared leaving nothing but a blackened circle and an occasional wrench or screwdriver to show where it had been. Other ships lost sections of wings, fuselage or stabilizers burned or riddled with shrapnel. In all, about 80 ships were put out of commission either partially or permanently. By 0415 the Jerries made the last of their passes and departed from the scene of death and destruction. The fuel dump and other fires were still burning fiercely ... punctuated by occasional explosions. Group Operations had suffered direct hits and ... only smouldering embers remained as day began to break.'*

A Ju 88 crew of I./LG 1, shot down at Cisterna on 29/30 May, had flown as pathfinders on this raid; *Oblt.* Behrens' 5./KG 76 had also taken part, as an observer shot down south of Cassino, five nights later revealed. His Ju 88 had carried fragmentation bombs and four flares to Corsica and *Lux* buoys had been dropped en route to the target to draw attention from the main force. The II./LG 1 contributed 23 aircraft to the first wave and 24 from II./KG 76 were among the second. A small diversionary strike on Bastia harbour did no damage but by Allied accounts the attack on Alesani destroyed eight B-25s and damaged 12; at Poretta 14 Spitfires and a B-24 were wrecked and 50 Spitfires damaged. At both airfields there was damage to runways, buildings, vehicles, fuel and ammunition dumps. Estimates of the human cost vary considerably: the RAF Air Historical Branch's campaign narrative gives 24 killed and 50 wounded while S/L Archie Wilson of No. 238 Sqn. RAF noted in his logbook: 'Bob Lount killed during Hun A.F. raid on 'drome. 229 [Sqn.] lost 44 men killed + 1 wounded. 452 = 7 killed — 9 wounded. 287 — 33 wounded.' The 488th BS history records 219 injured and 22 dead, the brunt of the attack being borne by ground personnel quartered on the flight line.

> *'Not only does the food come in for severe criticism but their destiny is apparently in the hands of a small clique of officers who are generally hated. It includes* Oberstlt. *Hallensleben* [Geschwaderkommodore] *... and* Oblt. *Schaffrath [Operations Officer, II./KG 76] ... Medals were their main interest and the* Staffel's *joy knew no bounds when one of the clique ... was promised the EK I if he did one operational trip. [This he duly did but] the aircraft was forced to ditch. The whole crew was rescued with the exception of our hero, who, handicapped by his abnormal girth, was unable to get through the escape hatch.'*

By now, the Allied armies were breaking through the German defences south of Rome and bombing was aimed at troop concentrations or demolishing towns to block the roads. On 27 May, 52 Ju 88s attacked Cisterna and traffic on the Appian Way; on the 29/30th, two Ju 88s were shot down while harassing traffic on the coast road through Terracina. The II./LG 1 lost its last Ju 88 over Italy in the early hours of 4 June, the day the Allies entered Rome; in a last raid on Anzio on 9/10 June, two warships were near-missed and a pair of landing vessels superficially damaged. Within days of the invasion of Normandy, I. and II./LG 1 were transferred to Belgium while III./KG 76 returned to Germany where the pilots learned that they were to fly the Arado Ar 234 — there would no longer be any place for the other aircrew.

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3. In 1961, a veteran of the 488th, Joseph Heller, published his novel *Catch-22*, with echoes of this raid in the episode where the enterprising Milo Minderbinder contracts with the enemy to bomb his own squadron.

This Ju 88 A-4 in tropical markings operated in the Mediterranean area and belonged to the Geschwader Stab of LG 1. The aircraft was coded L1+AA with the letter 'A' nearest the fuselage cross being painted in the Stab colour of green. The machine should also have had a white theatre fuselage band for the Mediterranean, and it appears that this has been roughly overpainted in a sand colour to match the upper surface colour.

Junkers Ju 88 A-4 coded L1+AA of the Geschwader Stab LG 1, Italy, summer 1944
The aircraft has been overpainted in the tropical sand colour on the uppersurfaces and fuselage sides with the undersides being left in RLM 65. The indiviual aircraft Stab letter 'A' would have been painted in blue. There is also evidence that the usual white Mediterranean theatre band has also been overpainted.

The Eastern Front

Spring–Summer 1944

Heavy bombers

In the late spring of 1944, KG 1 began operating from East Prussia with three *Gruppen* of He 177s. They bombed in formation from high altitudes where Soviet fighters were not at their best and carried heavy defensive armament but these attributes were not exploited for deep-penetration raids. In practice the *Geschwader* was used primarily to deliver heavier payloads of explosive against the *Luftwaffe's* customary targets on the Eastern Front, troop concentrations and rail centres.

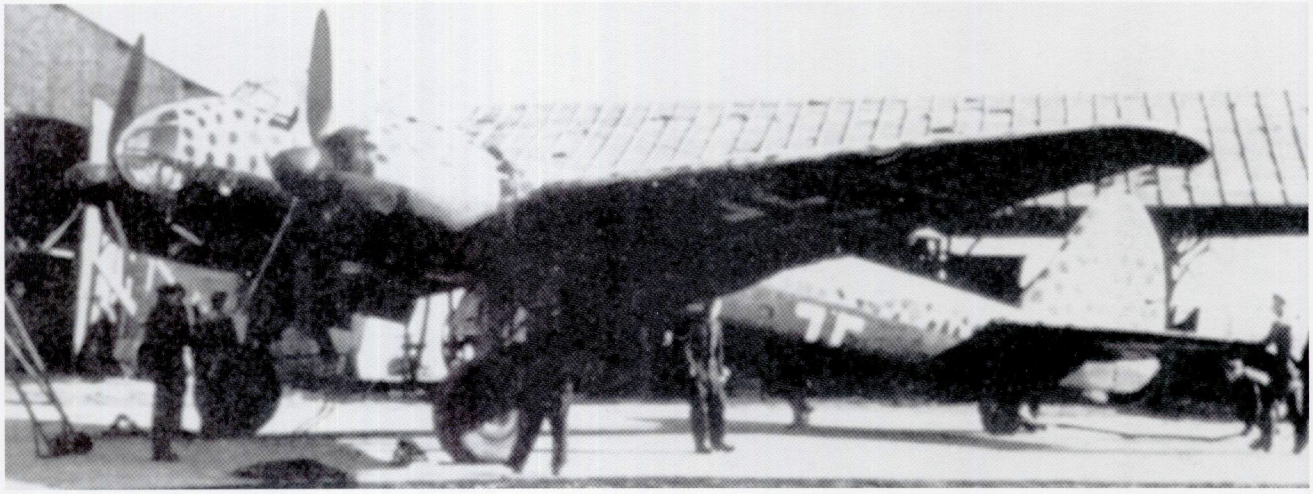
ABOVE: Ground crew haul on a cable which is presumably attached to the He 111 of III./KG 53 in the background. The aircraft seems to have black undersides and its white outline Hakenkreuz is barely visible. The upper surface camouflage appears to be a coarse oversprayed 'fishnet' of pale blue or grey with the 'holes' edged in a darker colour (grey or green).

Poltava

When *Hptm.* Fister, *Staffelkapitän* of 8/K.G.55, was shot down and killed over Tarnopol in June, his pilot, *Ofw.* Kramer, managed to evade capture and regained German lines three weeks later. That month, Stalin overcame his distrust of the Americans enough to allow Eighth Air Force B-17s to land in Ukraine after a raid on the Ruhland synthetic oil plant, south of Berlin. From Ukraine, they were to bomb another target and land in Italy. The shuttle mission took place on the 21st and after 12 hours in the air, the 45th Bomb Wing landed at Poltava, the 13th BW at Mirgorod. The *Luftwaffe* had shadowed them to their destinations and that night a force of He 111s from KG 4 (whose I. *Gruppe* was to mark the targets), KG 27, KG 53 and KG 55 set off to catch the Boeings on the ground. Bad weather meant that the entire weight of the raid fell on Poltava, destroying or damaging all but two of the 72 Fortresses present and igniting over 400,000 gallons of aviation fuel. The Americans quit Mirgorod next morning for a more distant airfield, deftly avoiding the German attack that night which had been intended to finish the job begun at Poltava. Even though the USAAF escaped this second blow, the raids had been a tremendous success for the *Kampfflieger* and, indirectly, for the defence of the *Reich*.

Hungary

In April 1944, IV./KG 2 had left France to continue its training programme in the relative safety of Hungary. In late August, with the Red Army attacking through the Carpathian mountain passes, it and I./KG 4 were the only bomber formations available to *Luftflotte* 4. The IV./KG 2's 11 trainee crews flew individual armed reconnaissance sorties but by 12 September the situation had so deteriorated that the *Gruppe* was pulled back to Neuburg-an-der-Donau in Germany. Meanwhile, seven crews were subordinated to I./KG 4 in Debrecen and on 14 September, they carried out a low-level daylight mission with SC 500 bombs to the major rail junction at Simeria. They returned to the same target next day with the only munitions now available, AB 70 canisters unsuited to wrecking rail infrastructure. Two more missions were flown — one against a station and the other to disrupt the line through the Iron Gate Pass — before the detachment was withdrawn from operations on the 26th, passing its Do 217s to 1.(F)/*Nachtaufklärungsgruppe* which operated the type until the end of the war.



RIGHT: This Ju 88 S-1 coded Z6+LH from 1./KG 66 forming part of the unit's Pathfinder Gruppe during 'Operation Steinbock', was based at Montdidier in France during September 1944. This variant had the gondola below the nose removed and the nose glazing modified to make the aircraft more streamlined.

Poland and East Prussia

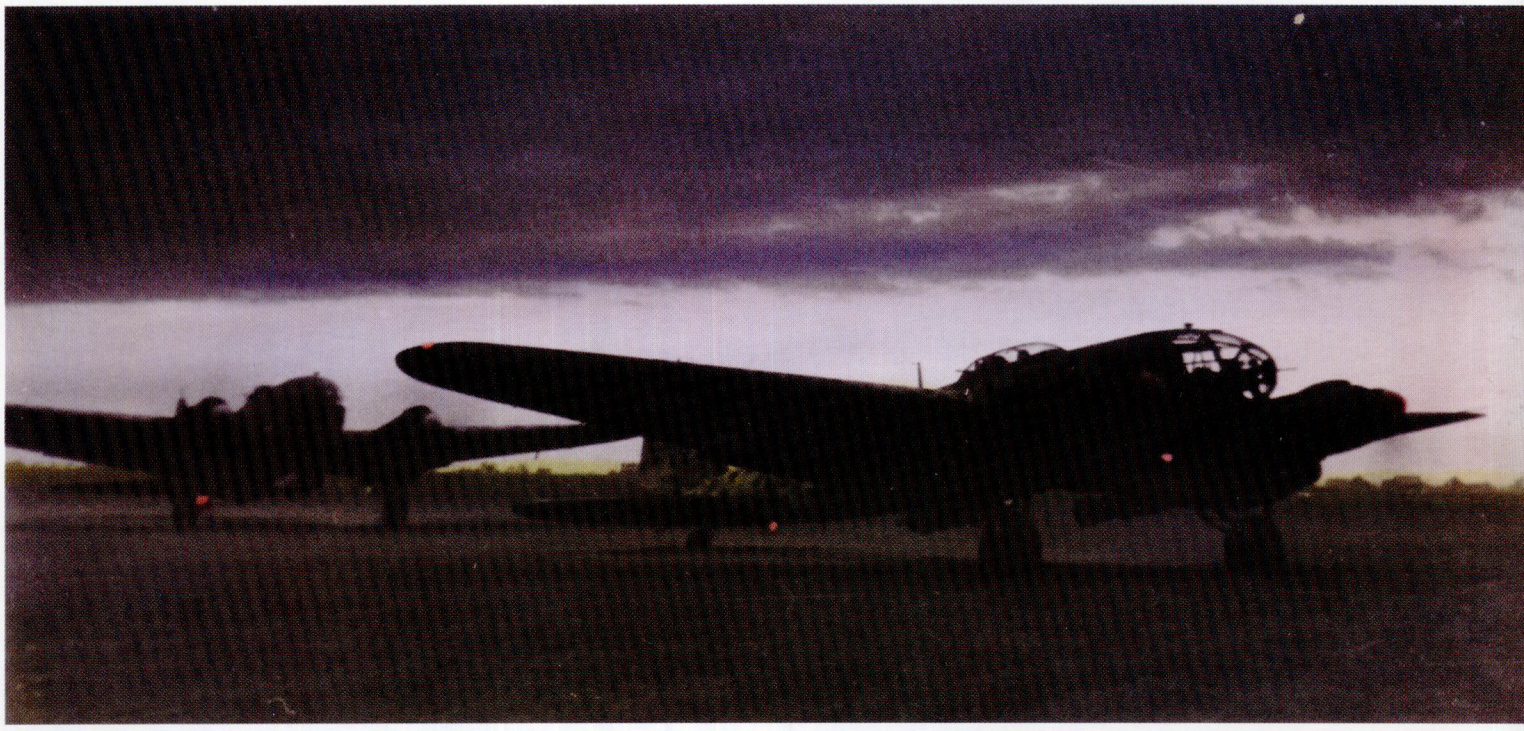
The Red Army's summer offensive began on 23 June, crushing German Army Group Centre. So dramatic was the Soviet advance that by July, III/KG.53 had been driven from the USSR to bases in Poland and around Königsberg, its He 111s bombing troop concentrations and communication centres besides transporting petrol. On 3 August, the *Gruppe* moved back from Grojec in Poland to Seerappen-Heiligenbeil, East Prussia and on the 16th left for France. The I./KG 53 transferred to Nancy and II. *Gruppe* to Ochey, near Toul. For moves like this, each *Staffel* had a Go 242 glider to carry essential spares. Another unit attempting to shore up the eastern Front that summer was the *Einsatzgruppe der 2. Fliegerschuldivision*, operating bombers as well as close support and transport types from Borisov before withdrawing to East Prussia. At least one of its He 111s, 2B+DC, was among a batch of Heinkels passed to the Hungarian Air Force and was used by a group defecting to the Western Allies in December 1944.

RIGHT: Oblt. Dietrich Kornblum (centre), Kapitän of 4./KG 53, probably photographed just after he received the Ritterkreuz on 9 June 1944, following some 400 operation flights. The officer to the right of the picture is probably Major Herbert Wittmann, Kommandeur of II./KG 53, who had been awarded the same decoration on 23 November 1941 and was to receive the Eichenlaube on 1 February 1945.

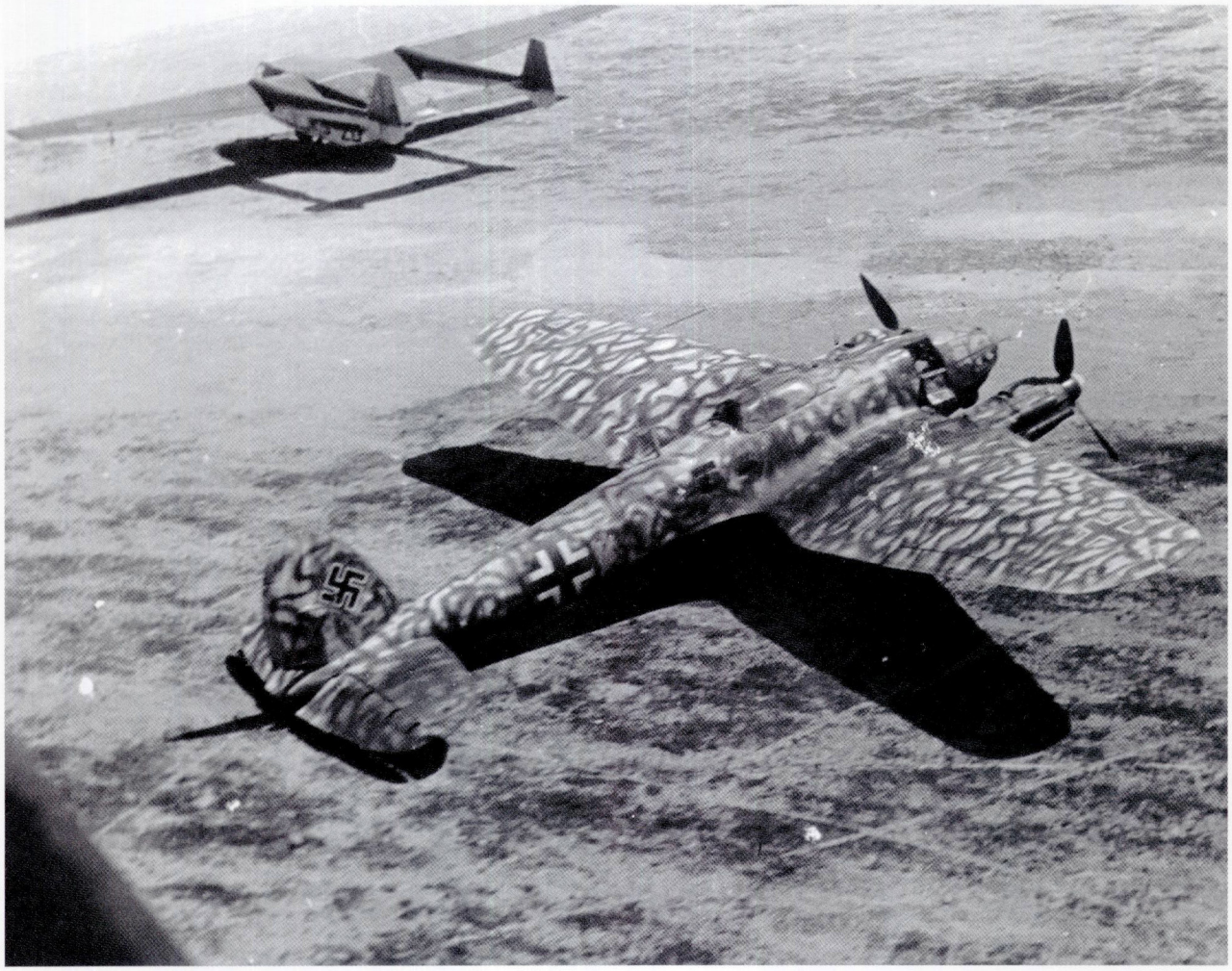
ABOVE: Oblt. Kornblum of 4./KG 53 poses in front of his He 111 H-20 in the background, probably at Piastow on the central Russian front. His aircraft in the background, A1+KM, has black-green and dark green RLM 70 and 71 upper surfaces over-sprayed with patches of pale blue grey RLM 76 to give a cloud effect. The undersides are black and the individual letter, 'K', is white. Not long after this photograph was taken, in July 1944, II./KG 53, transferred first to Jesau in East Prussia and then to Le Bourget in France.

LEFT: A front view of Oblt. Dietrich Kornblum's He 111 H-20. Note that the nose armament has been removed.

Summer 1943-May 1945



ABOVE: The caption on the rear of this print says 'Take off for air raid from Grojec.' This airfield in Poland was III./KG 53's base from 9–25 July 1944. With their red navigation lights on, two He 111 H-11s taxi out in the twilight, each carrying a single external bomb. The first aircraft has red spinner tips, the one that follows has white denoting 7. and 8./KG 53. respectively. The fuselage Balkenkreuze are the white outline (B5) type; upper surface camouflage is a pale grey or blue meander over dark green; undersides are black.



LEFT: Radom in Poland, spring 1944. He 111 H, 'Yellow K' of 9./KG 53 has night camouflage consisting of a dark green or grey overspray over a pale grey background. Yellow spinner tips denote the third Staffel of the Gruppe and exhaust shrouds are fitted. The 'K' of the individual aircraft is the only visible code letter. The Balkenkreuze are of type B6 on the wings and B5 on the fuselage (in each case, the outline is filled with the meander colour). The Hakenkreuz is black with a white outline. In the background is a Gotha Go 242 heavy cargo glider: prisoners reported that III./KG 53 had a small number of these to assist in transfers between bases.

LEFT: Seen in the bright Baltic sunlight of May 1944, but destined for night operations, a Ju 88 A-17 of 4./KG 77, fitted with FuG 200 anti-shipping search radar and with no ventral gondola. The upper surfaces have been sprayed with a meander pattern of pale grey or blue over the basic greens and the undersides are black. The spinners appear to be black or dark green, with two red rings.

The Mediterranean Convoys

January–August 1944

Losses of KG 26's obsolescent He 111s had mounted steadily and only 15 were available for a convoy attack on 1 February. Off the Balearics, three Beaufighters attacked stragglers, the Heinkels arrived later than planned and had to drop their torpedoes hurriedly and in darkness but the *Edward Bates* was hit, sinking while under tow. The Ju 88s of I. and III./KG 77 were brought in from the Baltic as reinforcements while II./KG 77 remained behind for FuG 200 training. The III. *Gruppe* arrived in Istres-Le Tube from 16–22 March with 21 Ju 88s and completed a move to Orange-Caritat on 1 May. Crews had been trained to use their radar for simultaneous blind torpedo launches at 4 km range but the Normandy invasion supervened. In April, I./KG 26 was withdrawn to Grove, Denmark for conversion to the Ju 88.

The most successful *Torpedoflieger* operation of the period was that against Convoy UGS 38 on 20 April with two merchantmen and the destroyer USS *Landsdale* (equipped to jam Hs 293s) sunk plus two merchantmen damaged by torpedoes. All 580 men aboard the *Paul J. Hamilton* died when its cargo of munitions detonated. On 11 May, 62 Ju 88 A torpedo-carriers of KG 77 and KG 26, escorted by 24 Ju 88 Cs of I./ZG 1, took off from France to attack the 82-ship UGS 40 off the Algerian coast. The original intention to go in by moonlight or artificial illumination had been frustrated by the weather and so a dusk attack with *Zerstörer* escort was substituted. Of the 13 reconnaissance aircraft sent out, only two daylight photographic sorties and a nocturnal radar mission had brought back useful information.

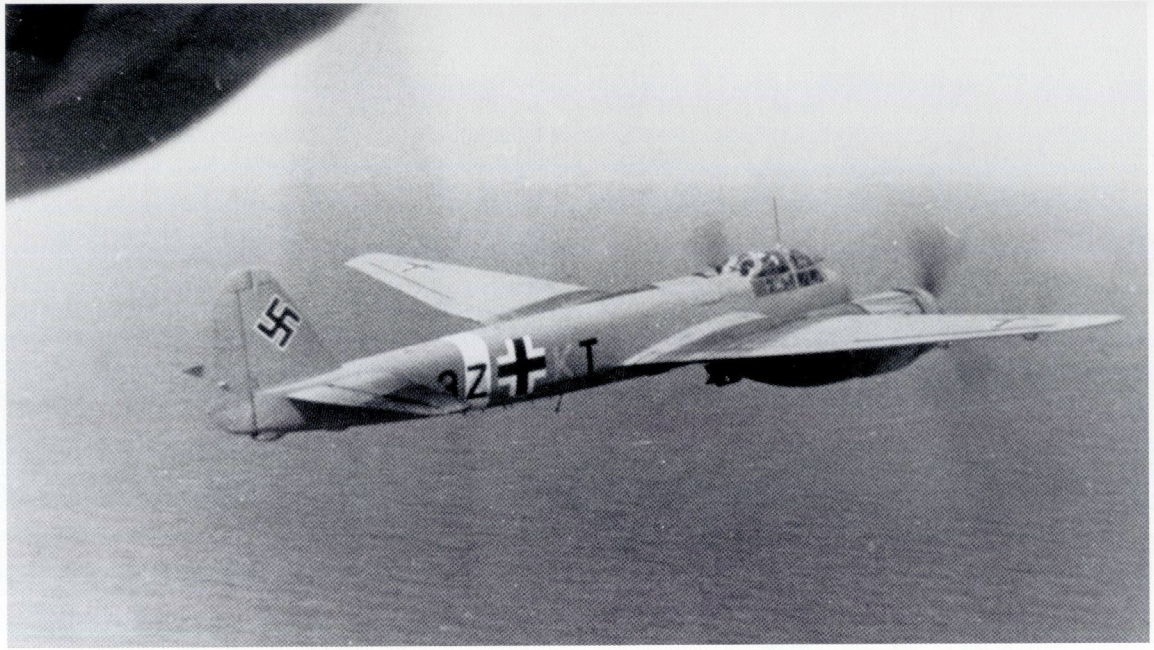
The attack force rendezvoused over two points on the French coast but a I./KG 77 machine had the misfortune to be shot down by a German fighter near Berre. There were two formations, the first consisting of four closely-spaced waves, the second made up of three. The escort was picked up according to plan, two groups of nine *Zerstörer* flying low between the bombers and the sun while others flew level with the leaders, screening to the east. Eight torpedo aircraft returned early, cutting the attacking force to 53. After a three-hour flight, they found the convoy three and a half nautical miles further east than estimated by dead reckoning. The element of surprise achieved on on 20 April was absent this time: the ships proved to be shrouded in smoke, there was strong AA defence, including naval artillery, and RAF fighters overhead.

Summer 1943-May 1945

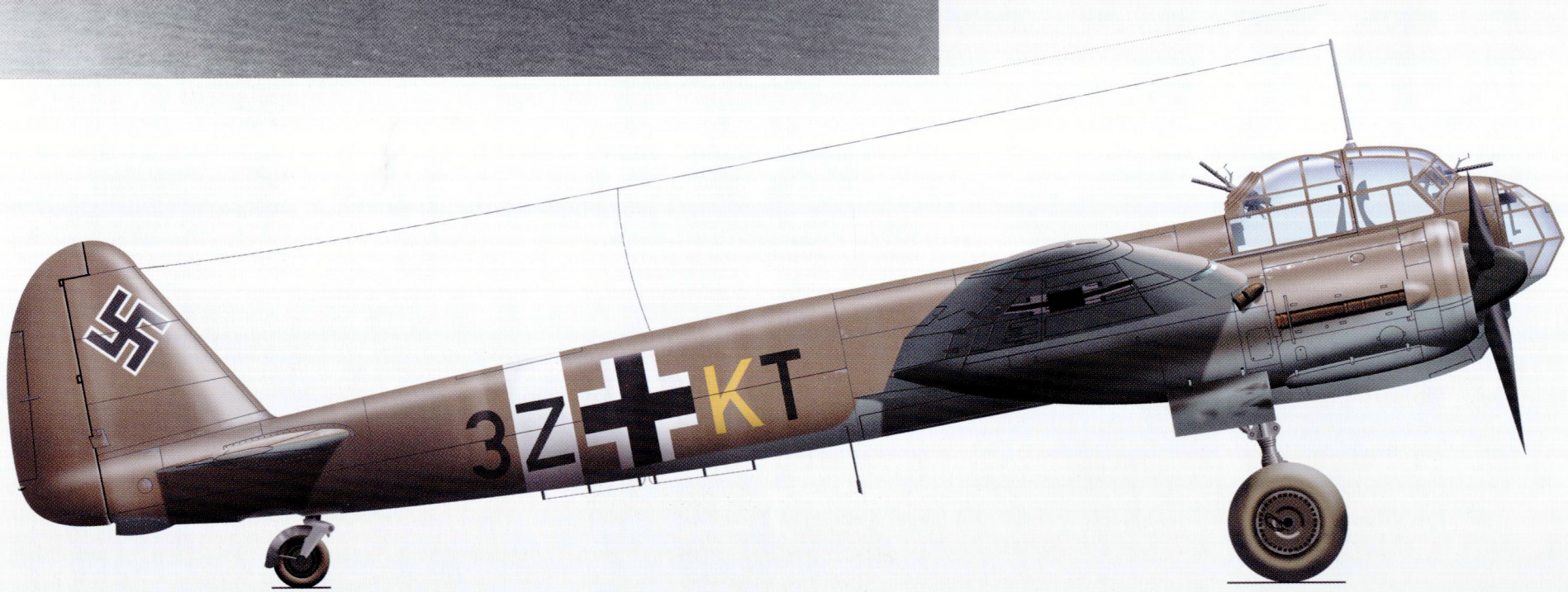
ABOVE: The 4. and 5./KG 77 spent the spring and summer of 1944 training at Heiligenbeil on the Baltic, as far as fuel supplies allowed. The original print of this photograph is dated '5/44.' This mud-spattered Ju 88 A (either a late A-4 or an A-14) is configured for torpedo-bombing: it has a 2 cm MG FF cannon in place of a bomb sight while painted on the sighting window is the aircraft's letter, a black or red 'J' with a white outline. There are three vertical lines painted on the nose glazing to assist the observer in lining up on a target. The camouflage appears to be the standard 70/71/65.

ABOVE: The same aircraft as the photograph on the right showing enthusiastic application of the meander pattern (in a variety of thick and thin strokes) that has obliterated the unit code on the fuselage and the lower half of the white outline Balkenkreuz. The original print's caption says that this was W.Nr. 801041 and that in July it became 1H+HU when its crew was transferred to IV./KG 26. On the wing is Obgfr. Hans Wittkowski (gunner); in the cockpit, Obgfr. Helmut Freudenberger (pilot); standing, Obgfr. Franz Volpert (wireless operator). All are casually dressed.

ABOVE: The cockpit of the same aircraft as in the photograph left: this view shows how the meander has been applied over the original segmented pattern of two greens. Pilot, Obgfr. Helmut Freudenberger, (left) and wireless operator, Obgfr. Franz. Volpert (right) were posted missing when their aircraft crashed into the Baltic during a training flight on 23 August 1944. Gunner, Obgfr. Hans Wittkowski and observer, Ogfr. Erwin Klein (who took these photographs) were rescued.



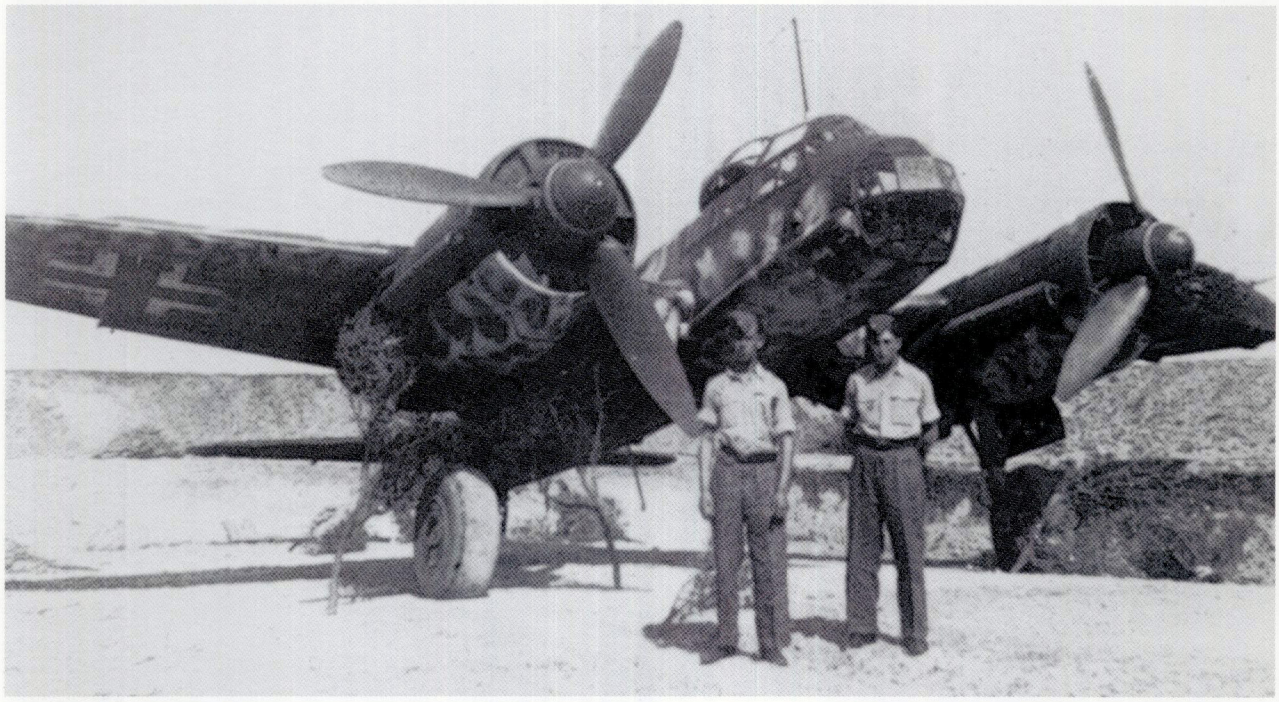
Early in 1944 Ju 88s of I. and III./KG 77 were brought in from the Baltic to reinforce the obsolescent He 111s of KG 26. This Ju 88 A-4 carrying an external bomb load, of 9./KG 77, and coded 3Z+KT, is flying low over the Mediterranean against Allied shipping.



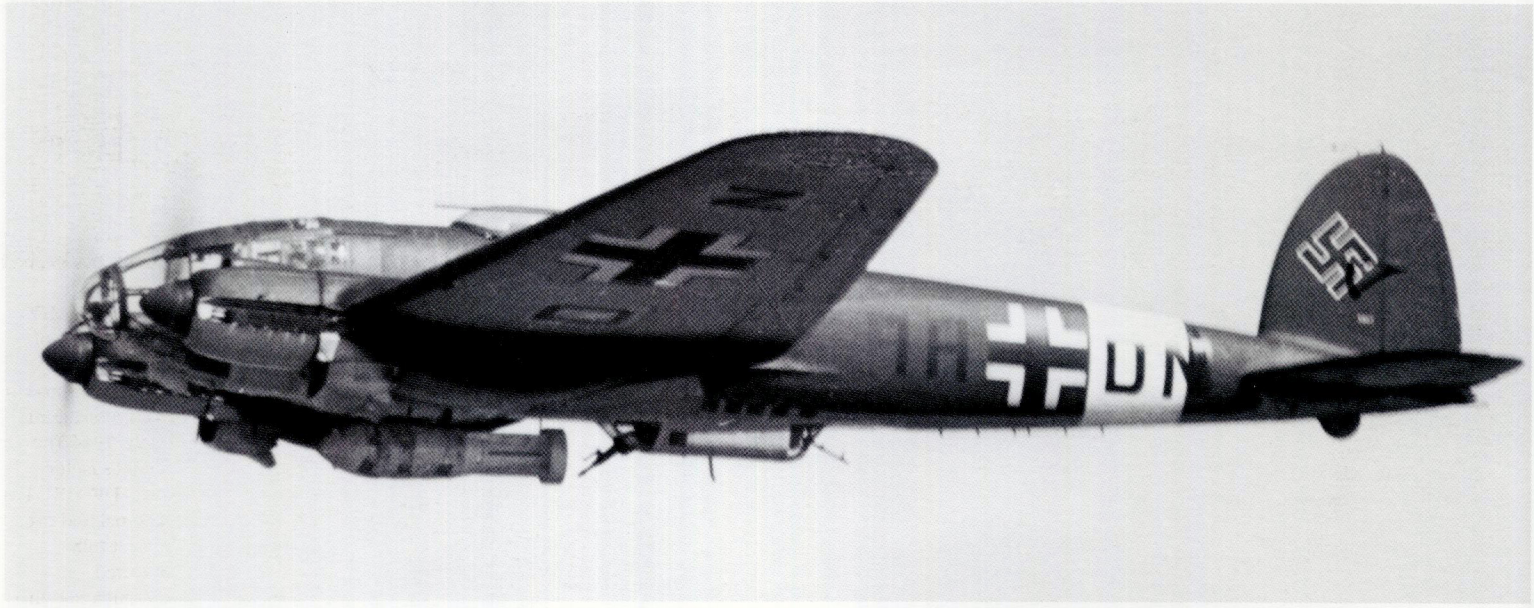
Junkers Ju 88 A-4 coded 3Z+KT of 9./KG 77 summer 1944

The aircraft has been painted in a tropical sand colour on the uppersurfaces and fuselage sides with the standard RLM 65 underneath. The individual aircraft letter 'K' is painted yellow in the Staffel colour. The position of the white Mediterranean theatre band is unusual as the more common position would have been further to the rear of the fuselage.

Summer 1943-May 1945



LEFT: The Ju 88 A-17 was a special torpedo variant, which had the ventral gondola removed. Note also the long blister along the starboard side of the nose which contained the equipment for adjusting the steering mechanisms of the torpedoes while the machine was in the air. Very few Ju 88 A-17 variants were built and most were used by KG 28 and KG 77.

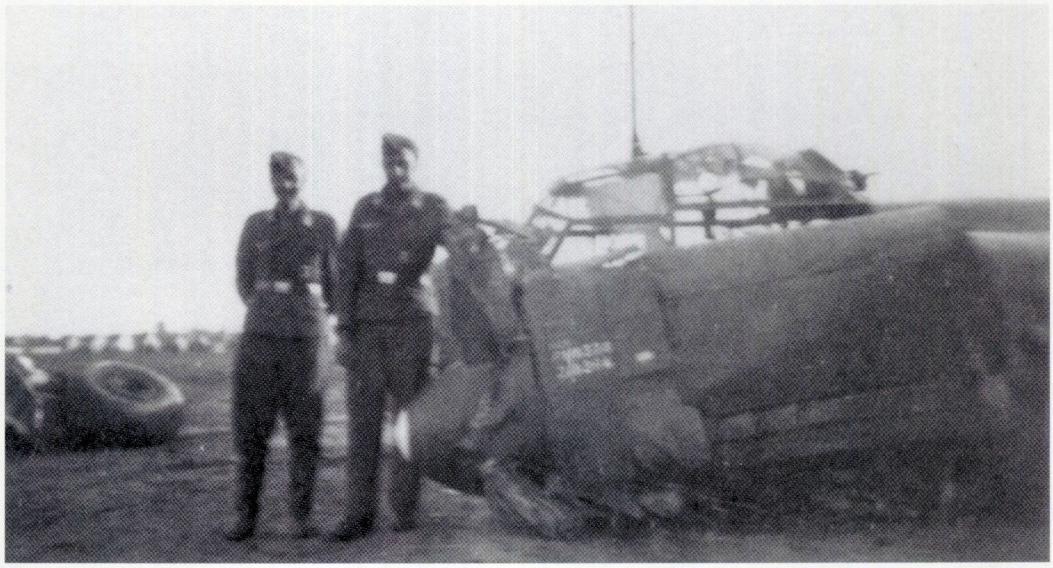


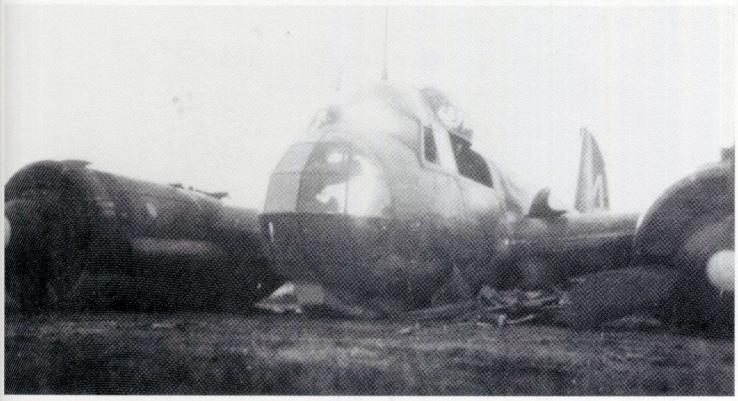
ABOVE: A fully loaded He 111 H-6 of 5./KG 26, coded 1H+DN, heads out on another mission. Note the unusual extra wide white band around the fuselage indicating the Mediterranean theatre of operations.

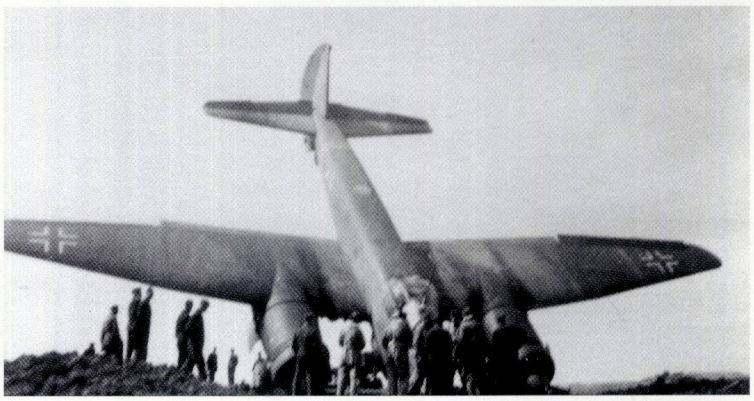
The first group of Ju 88s, 15-strong, released 30 torpedoes within seven minutes, claiming a freighter and a destroyer severely damaged. Accompanied by the *Zerstörer*, the second element went in just one minute later, 14 aircraft dropping two torpedoes each and reporting three freighters sunk with two more and a destroyer severely damaged. The outcome of attacks on two destroyers and one escort vessel was not observed. Next, 24 aircraft attacked with 33 torpedoes, claiming three cargo vessels sunk plus two probables and a transport, a tanker, a cargo vessel and a light cruiser damaged. Another six freighters and two destroyers were attacked with unknown results.

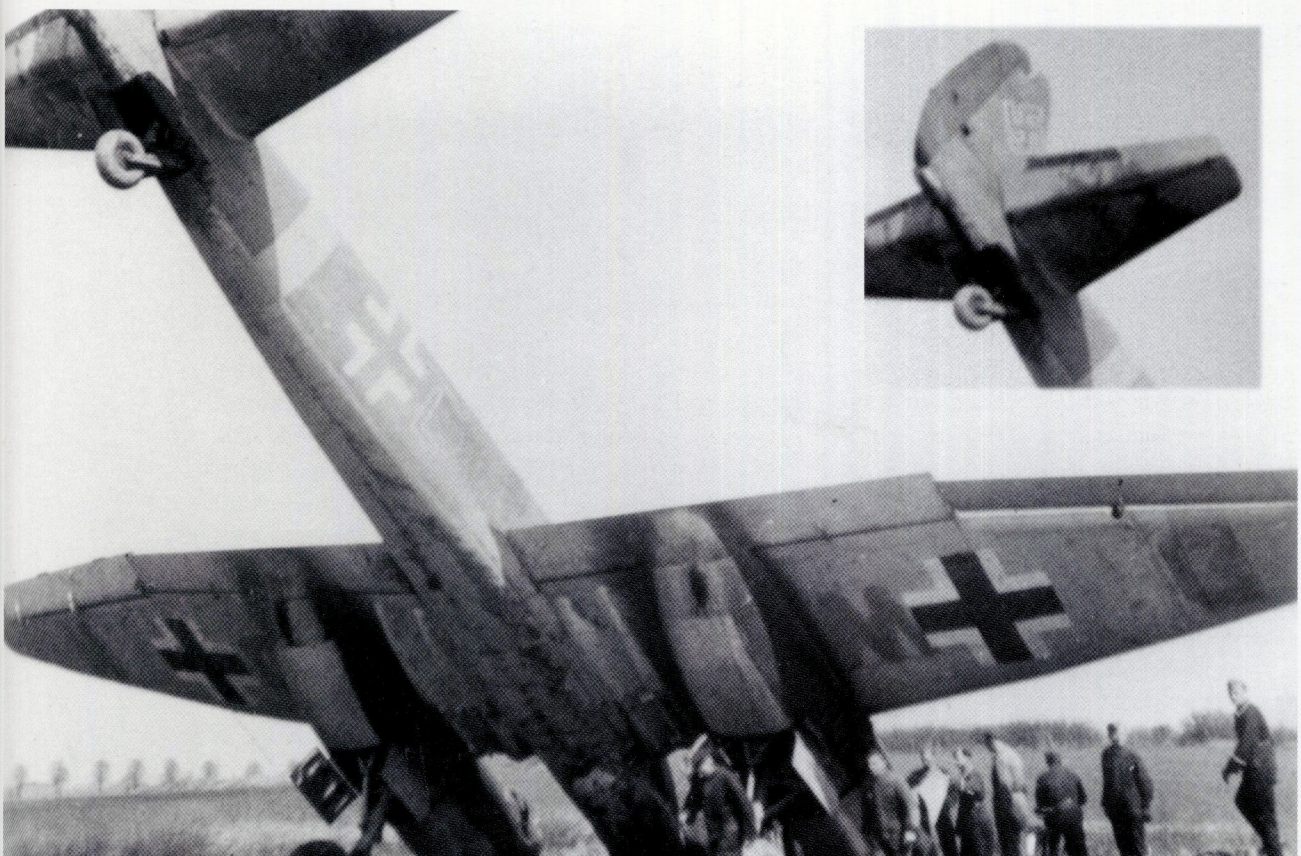
Despite these reported successes, the British Official History of the war in the Mediterranean asserts that the 91 torpedoes expended 'scored not a single hit' while German losses were severe. French Airacobras of GC I/4 had shot down a Ju 88 shadower earlier on 11 May; the ships' gunners claimed two of the attacking force; Mosquitoes of No. 256 Sqn. RAF 'intercepted the German force and delayed their attack', claiming 2–2–0 and 153 Sqn. Beaufighters also claimed 2–2–0. A single Beaufighter of 272 Sqn. was lost while covering the convoy. Three I./KG 77 aircraft were missing from the first attacking group; from the second, III./KG 77 emerged minus five of its Ju 88s and I./ZG 1 also lost a Ju 88 C. In the third element, no fewer than seven aircraft of III./KG 26 were lost, five them flown by crews on their first operation. Seven Ju 88s broke off their runs owing to technical problems.

RIGHT AND BELOW LEFT: Obgfr. Helmut Freudenberger of 4./KG 77 crashed this Ju 88 A-4 with 33% damage during a night practice mission from Heiligenbeil in May 1944. Note how the ventral gondola (with the flat front, permitting installation of a cannon) has been crushed and that this training aircraft has four underwing bomb racks, even though KG 77 was a torpedo unit. Camouflage appears to be 70/71/65; spinner tips are white (the Staffel colour) and there is a large white '4' painted on the rudder. The two numbers (only semi-legible) painted on the nacelle may be engine Werknummern.









ABOVE AND LEFT: This Ju 88 A-4 of 4./KG 77, was stood on its nose in East Prussia during March 1944. The aircraft's factory code (DW+DH) has been painted over but not fully obscured. Camouflage is the standard 70/71/65 and there is a yellow fuselage band denoting a training machine. The only visible element of an operational code is the individual letter 'L' in black with a white outline. Late war, white outline crosses are carried on the upper wing surfaces and fuselage. As the inset image shows, there was a white outline Hakenkreuz on the fin. Normal external bomb racks are fitted.

Mediterranean convoys: losses of merchant vessels to *Luftwaffe* air attack, February–May 1944

Date	Convoy	Ship	Fate
01.02.44	UGS 30	*Richmond P. Hobson*	damaged, no casualties, reached port
01.02.44	UGS 30	*Edward Bates*	torpedoed, sank while under tow
01.04.44	UGS 36	*Jared Ingersoll*	damaged by torpedo, towed to Algiers
20.04.44	CAF 31	*El Biar*	sunk by torpedo
20.04.44	UGS 38	*Paul J. Hamilton*	sunk by torpedo
20.04.44	UGS 38	*Samite*	damaged by torpedo, towed to Algiers
20.04.44	UGS 38	*Royal Star*	sunk by torpedo
20.04.44	UGS 38	*Stephen F. Austin*	damaged by torpedo, towed to Algiers
31.05.44	KMS 51	*Nordelfinge*	dive bombed (or torpedoed?) and sunk

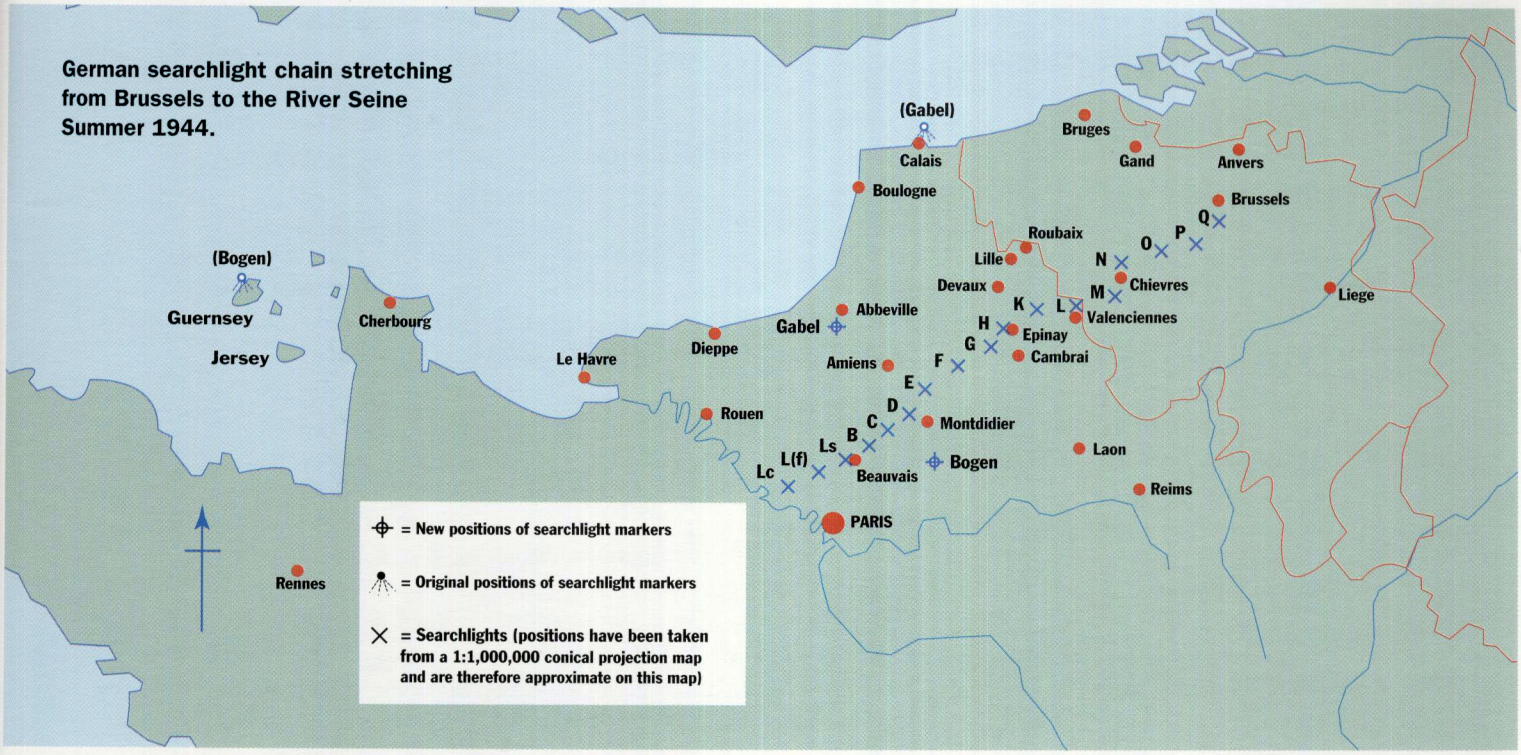
The 2. *Fl.Div.* assessed the overall results as good but their own losses as 'excessive... due exceptionally strong defence and lack of experience of new crews.' Surprise had been forfeited, so it was thought, because the Allies had deduced that any attack could only come at dusk. The Germans also believed 'camouflaged aircraft reporting boats' were operating between Menorca and Sardinia. By chance, the groups had arrived over the convoy at same time, restricting freedom of manoeuvre and impeding attack runs. In close formation, the waves of aircraft had been broken up by naval artillery but the night fighters had engaged only one wave of one formation effectively. Unsurprisingly, a second attack planned for the night of 12/13 May did not take place.

Oberleutnant Kramprich's 6./KG 77 moved from Heiligenbeil on 5 June after receiving 12 new Ju 88 A-4s, only three or four of which had FuG 200. They left the 4. and 5. *Staffeln* behind, training as anti-shipping pathfinders, although they apparently lay idle most of the summer due to fuel shortages. The 6. *Staffel* spent much of the summer flying night overwater reconnaissance with FuG 200 and the FuG 101 radio altimeter but was active against the Normandy invasion fleet on the nights of 14/15 and 22/23 June. The *Staffel's* losses included 3Z+BP and 3Z+NP destroyed when Istres was strafed on 16 June; 3Z+LP missing on 2 August and *Uffz.* Pabst's 3Z+DP was shot down off Corsica by a Beaufighter on the 6th.

France, Biscay and the English Channel: Summer 1944

The Normandy invasion provided the bombers with a wealth of targets on land and sea, reachable with only a short exposure in enemy skies. Navigational help came from a chain of searchlights stretching from Brussels to the River Seine. *Fw.* Kurt Wuttge, an observer with 11./KG 2, recounted in captivity how he flew: '...from Laon [attacking] AA positions and troop concentrations. We had lots of losses over that. We also laid mines between the battleships [in the Ju] 188. I have flown on a tremendous number of minelaying missions...' In his memoir *The Big Show* (Corgi, 1965), French pilot Pierre Clostermann described the nightly routine on an Advanced Landing Ground in Normandy, as the Germans: '... came over in groups of about a dozen every five minutes or so ... letting their bombs go more or less anywhere. It didn't really matter where, as the beachhead was so full of troops, ammunition dumps, convoys of lorries, concentration of tanks and planes that they could scarcely fail to score a bull every time. The nightmare went on until 3 a.m.'

From 8 June, RAF Mosquitoes were claiming multiple kills practically every night against *Luftwaffe* bombers aiming for the beach head, a pattern that would continue throughout the campaign. Taken together with the successes of the massed land-based and ships' AA, attrition of the already limited bomber strength was severe. Although historians commonly speak of the *Luftwaffe* as locked in a hopeless struggle over Normandy, morale among the *Kampfflieger* seems actually to have improved.



In England, Mosquitoes of 219 Squadron were scrambled on the night of 7/8 June to intercept enemy aircraft 'raiding the east coast' and shot a Ju 188 down into the sea off Harwich. The next night, the frigate HMS *Lawford* was bombed and sunk off Juno Beach with 37 of her crew killed. On 12 June, a day after leaving Italy, six 1./LG 1 Ju 88s were in action against the landing fleet from Brussels-Melsbroek. The next night, only four aircraft were sent up and one of those was lost to AA fire over the beach head but torpedo bombers did sink the destroyer HMS *Boadicea* off Portland Bill. On the night of 14/15 June, an aircraft of 6./LG 1 was shot down by AA, apparently while trying to drop supplies to German troops cut off in a radar installation at Douvres. At 21.55 GMT on 16 June, Ju 88 F1+SN of II./KG 76 was shot down, its *Bordfunker* and *Bordschütze* finding refuge with the German *353. Inf.Div.* Less fortunate was 3./LG 1's *Staffelkapitän* , *Oblt.* Schulte whose body was recovered from the sea on the 23rd.

Mistletoe

Eight Ju 88s of *Einsatzstaffel* KG 101 arrived at Tours in the early hours of 12 June. These were the lower components of a new weapon, the *Mistel* (Mistletoe) composite aircraft. Designed for use against capital ships and concrete fortifications, *Mistel* mated a 3,500 kg hollow charge warhead to a Ju 88 whose cockpit had been dismounted. This was flown to the target area by the pilot of a Bf 109 or (later) Fw 190 mounted above it on struts. He aimed the whole assembly at the objective, engaged the gyro-stabilised autopilot aboard the Ju 88 and blew explosive bolts, leaving the bomber to continue (in theory) unerringly to its goal while the fighter turned for home. In practice, the system was cumbersome on the ground, vulnerable in the air, technically complex and prone to breakdowns — not least from the overburdened undercarriage — and at this stage very few were available. The first mission was flown from St. Dizier on 24 June: four *Mistel* led by *Oblt.* Horst Rudat. Target illumination was provided by I./KG 66 and escort by I./JG 301. Off Gold Beach, a near miss inflicted serious damage on the frigate HMS *Nith*. The supply of *Misteln* constrained operations, the next known one coming on 18 July when a hit was claimed on a battleship (probably a Mulberry harbour blockship in fact) while an abortive sortie on 10/11 August cratered a field in Wiltshire.

Morale in the Normandy campaign

Bomber crews interrogated have shown higher morale and more resistance to interrogation than those captured in attacks on England earlier in the year... Fighting spirit is good and crews are apparently still going for their targets in spite of night-fighters and of A.A. which is described as being more powerful and concentrated than that formerly encountered over London.

G.A.F. crews were never enthusiastic about raids on England, which they regarded as a waste of effort. Now they feel that they are doing a real job to help their country and their army. They also feel that they are not being sent on sacrificial missions, but that their strength is being nursed and used against worthwhile targets.

Mining

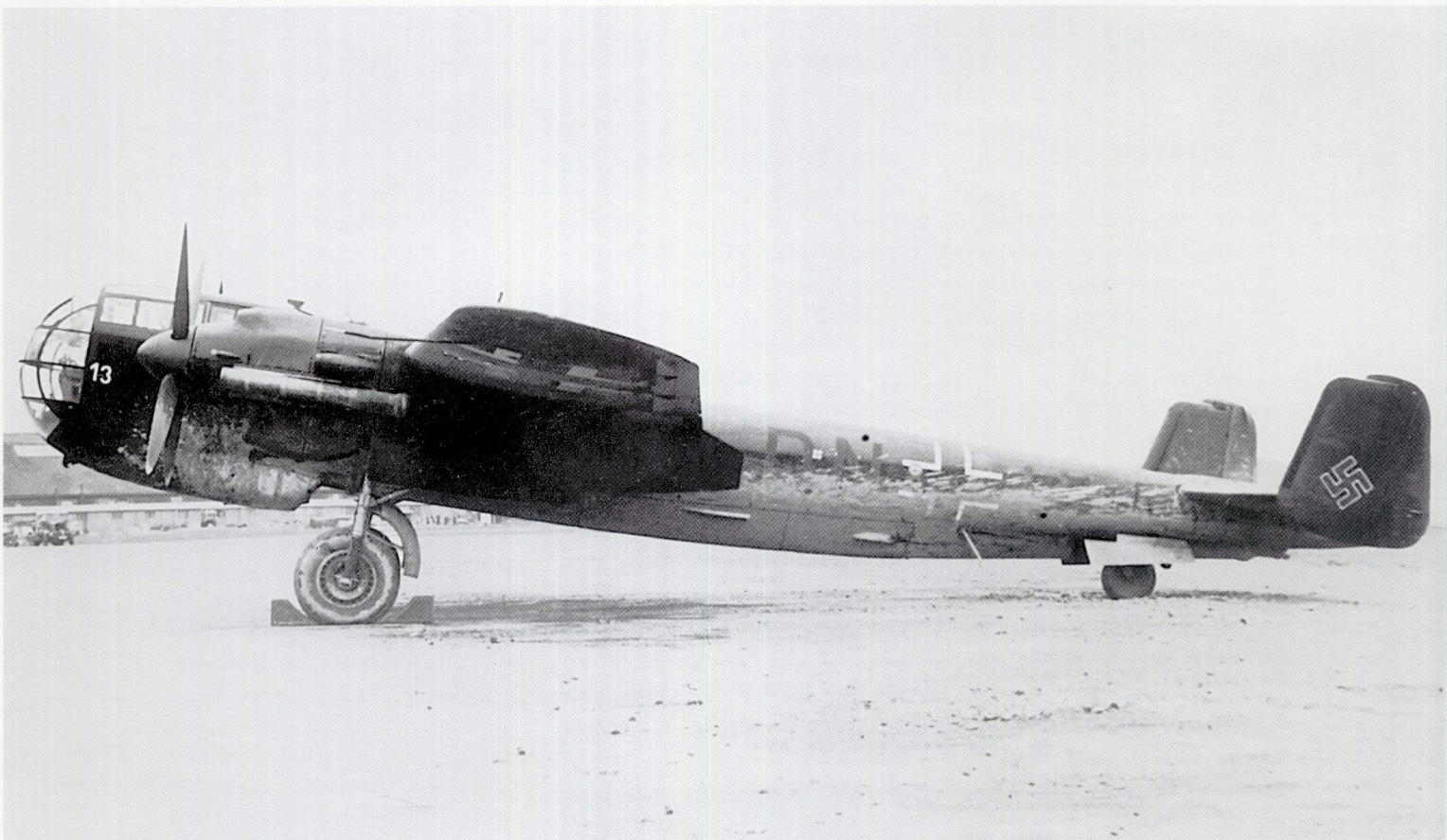
The Germans appear quickly to have concluded that it was better to attack troops, equipment and supplies while they were still aboard ship and that direct attacks on shipping were less productive than mining the seaways. Mines exacted a steady toll throughout the summer. On the last night of June, the bombers flew only minelaying sorties, 66 in all. Two nights later, the effort was divided between mining (62 sorties), attacks on ships (14) and on airfields (just five sorties).

At the end of June, I./SKG 10 was redesignated as III./KG 51 with no change to its night harassment tasks and later in the summer, KG 51 would operate three types of fighter bomber: I./KG 51 with the Me 262, II./KG 51 with the Me 410 and III./KG 51 with the Me 262. The sortie rate escalated on the night of 4/5 July: there were 66 minelaying sorties, three against roads in the Caen–Bayeux area and 67 against ships. KG 100 weighed in with *Fritz-X* and Hs 293 and some 7,000 tons of merchant shipping were claimed destroyed, as well as a destroyer. Damage was said to have been inflicted on a vessel of 1,500t and on a light cruiser. A further 38,000 t, two cruisers and two destroyers were attacked without effects being observed.

On the 5th, an He 177 was shot down over Cognac airfield and that night, 30 aircraft of IX. *Fl.Kps.* attacked Allied-occupied villages. On the 7/8th, 91 machines flew mining operations and there were 24 sorties against occupied villages west of the Orne and airfields in the Caen–Bayeux area. A new phase began that night when He 111s of *Maj.* Martin Vetter's III./KG 3 flew out from their Dutch bases at low level over the North Sea, climbed to 500 m and launched eight Fi 103 flying bombs (better known as the V-1) against London aiming to outflank the defences south of the city. An He 177 of KG 100 was destroyed in an air raid on Châteaudun on the 9th and on the night of the 11/12th, four Do 217s of II./KG 100 operated against Resistance forces.

The tempo of operations was clearly taking its toll: on the 15th, orders were given that eight Do 217 crews ready for night flying should be sent to Münster-Handorf where they would receive final training for operations with II./KG 2. Five days later, 7./KG 2 at Achmer was requesting an allocation of 37 t of petrol each month, despite Göring's warning on the 6th of the 'deep inroads' already made into stocks of aircraft fuel. The *Einsatzstab* of KG 2 was at Laon-Couvron, France during this period. On the 16/17th, *Luftflotte* 3 recorded that units of IX. *Fl.Kps.* hitherto engaged in minelaying operations

BELOW: The Do 217 M became operational around the end of 1943. This aircraft has just been delivered from the factory and still carries the factory call sign. Although the machine appears to have standard factory finish, it has evidently landed on a very muddy grass airfield, as the whole of the underside of the fuselage as well as a large proportion of the sides have been completely covered in mud, concealing the code.



2. Fliegerdivision orders for the night of 6/7 August 1944:

(a) KG 26 with II./26 and KG 77: concentrated attack utilising moonlight on shipping NE Barfleur with aircraft not used on night of 5/6th. II./KG 26 to take off from Tavaux; KG 77 [from] Dijon. Return to: KG 26, Plan de Dieu; KG 77 at base. Alternates: Avord, Dijon, Tavaux... (b) Height, weather permitting, 300-900ft. High tide at time of attack. 1.(F)/33 to fly recce with one Ju 88 S, crossing coast at 20.50hrs. [GMT]

had operated for the first time against land targets including troop concentrations, airfields and villages. Some 84 aircraft had strafed while another 24 had used both bombs and guns. Four X. *Fl.Kps.* machines had attacked shipping.

The 21st of July saw six III./KG 100 crews hurriedly briefed to attack a group of warships sighted off Brest. Armed with single Hs 293s, they were to search in twos at sea level but the last pair — one of them flown by the *Staffelführer* of 9./KG 100 — was bounced by Mosquitoes and shot down, seven of the eight airmen being rescued by the very ships they had planned to attack. On the 24th, *Fw.* Krag's crew claimed a *Fritz-X* hit from 6,000 m on the quarter deck of a warship west of Brest. After confirmation by a reconnaissance aircraft, they were awarded a certificate marking their success. Otherwise, this had been a bad day for the bomber force: a daylight Allied raid rendered Valence (6./KG 26's base) unserviceable and destroyed or severely damaged 24 aircraft on the ground while IV./KG 40 lost aircraft when Lechfeld was strafed. Two days later five Ju 88s and two Do 217s were lost there in another raid.

Units from Southern France also operated over the Channel. At dusk on the 26th, 2. *Fl.Div.* sent 24 aircraft to attack shipping in the Baie de la Seine, claiming 4,000 t sunk, 7,000 t probably destroyed and 18,000 t damaged. On the next night, IX. *Fl.Kps.* made a major effort against occupied villages, again leaving the ships (off Barfleur this time) to 24 Ju 88s of 2. *Fl.Div.* but 12 aircraft broke off due to bad weather and five for technical reasons. On the 29/30th, F/Lt. Charles and F/O Jameson of No. 488 Sqn. RAF claimed no fewer than three Ju 88s and a Do 217 shot down between Caen and Lisieux. For the month of July, *Luftflotte* 3 reported the following bomber losses:

IX. *Fliegerkorps*	129 aircraft;
X. *Fliegerkorps*	23 aircraft;
2. *Fliegerdivision*	19 aircraft.

Bridges and partisans

In the first days of August, the American breakout from Normandy was threatening the Breton Peninsula. To stop this, III./KG 100's guided bombs were directed against land targets for the first time: the road and railway bridges at Pontaubault and Pontorson, south of Avranches. The first mission was set for 2 August, with nine Do 217s heading out over St. Malo from 21.00–21.10 at low level to Pontaubault and returning over Allied territory. At least one of the Dorniers carried a pair of SC 500 'dumb' bombs which were dropped from 2,700 m to no effect. Two Do 217s were lost.

Six of III./KG 100's aircraft returned just before midnight on the 4th, claiming a hit on the Pontaubault rail bridge with an SC 250. *Oberfeldwebel* John's crew planned to direct their Hs 293 at the bridge's abutments but, emerging into clear skies over the target, were shot down by an RAF night fighter before they could launch. On the 5th, III./KG 100 reported just eight machines serviceable, making that night's mission a maximum effort. Each aircraft carried a single glide bomb, intending to cross the coast west of Avranches and make a north–south attack run. Before they could launch, *Leutnant* Alfred Schlecht (personal callsign, *Schlächter*, 'Butcher') of the *Gruppenstab* and his crew were forced to bale out when a night fighter set their port engine on fire. On landing, Schlecht was shot in the leg by the Resistance and his gunner, *Uffz.* Friedrich Hoefelmeier, was held for eight days before being turned over to Allied troops.

In the early hours of the 7th, ten Do 217s were dispatched, six of them to Pontaubault. They flew direct from Toulouse, taking continual evasive action and maintaining sufficient height to avoid Resistance small arms fire. Haze covered the target when 6N+GR arrived and *Lt.* Hans Kieffer was about to take his Hs 293 back to base when a night fighter exploded his Do 217's fuselage tank and the crew baled out. *Leutnant* Engelmann's 6N+AD suffered the same fate but another aircraft reported a probable *Fritz-X* hit on a railway bridge from 6,000m. The final mission against the bridges, on 7/8 August, saw a Do 217 of 8./KG 100 shot down by AA fire.

Meanwhile in Valence on the 4th, II./KG 26's *Kommandeur* had requested permission to operate three Ju 88s in an attempt to relieve liaison staff at a hospital surrounded by partisans at Privas and two of the *Gruppe's* aircraft subsequently dropped bombs nearby.

Ships

On the night of 5/6 August, three Ju 88s from II./KG 26, staging out of Dijon, located a target despite jamming on their FuG 200 sets; two of their torpedoes were brought back but the other four exploded. The British Admiralty reported that two frigates, HMS *Thornborough* and *Retalick* had been attacked by torpedo-bombers while proceeding to patrol off Cap d'Antifer and that: 'The enemy made eight attacks; one torpedo missed five yards astern of the Thornborough... our ships suffered no casualties or damage in these actions.' One of the returning bombers was shot down by a night fighter 20 km north of Orleans.

The 12 Ju 88s detailed by II./KG 26 to engage shipping off the Isle of Wight on the night of 6/7 August encountered bad weather and only one attacked, the remainder bringing back their torpedoes. The successful aircraft set down at Dijon, eastern France, claiming one hit on a destroyer, while another Ju 88 landed in Tavaux with engine damage. Valence, II./KG 26's home base, duly reported the expenditure of two torpedoes during the night.

Although efforts centred on the Channel, the Atlantic front was still active and on 9 August, IX. *Fl.Kps.* signalled III./KG 100 that it was sending officers to La Rochelle to liaise with the Navy so that Allied destroyer groups between Lorient and St. Nazaire could be engaged. Three days later, *Luftflotte* 3 reported that in the Gironde Estuary–Lorient area, Hs 293s had achieved near misses on a destroyer and a 2,000 t landing vessel, with an explosion and a patch of oil near the stern of the latter. On the 14th, it was announced that the *Gruppe's* missions over Biscay would continue until the Allies landed in the South of France, then it would operate exclusively in the Mediterranean.

By the night of 14/15 August, He 177s of 2./KG 40 were operating from Schwäbisch Hall, Germany. North of Barfleur, *Hptm.* Stolle's aircraft (W.Nr. 550077, F8+AN) was attacked by a P-61. Tail gunner *Uffz.* Fabinger returned fire, reporting that he had shot the attacker down, and other Heinkels of the *Staffel* saw it fall, burning. In fact, the P-61 of the 422nd Night Fighter Squadron was able to regain its French base with one engine on fire but nosed over on landing and never flew again. Stolle's crew painted a single victory bar on their Heinkel's tail.

BELOW: An He 111 H-6 of 8./KG 53 comes in to land after another mission. The aircraft is painted in standard factory camouflage of 70/71 uppersurfaces and 65 underneath and has the white Mediterranean theatre band on the rear fuselage. The code A1+NS is also of standard size with the individual aircraft letter 'N', which should be in red but is also outlined in white. The spinners are painted yellow indicating the III. Gruppe. As was common practice for identification purposes, the undersides of the outer wing tips have also been painted white.

Supplies and Cities

The III./KG 53 was based at Rouvres in Eastern France from 17–20 August, dropping ammunition and supplies to German troops fighting to escape encirclement. On the latter date, 20 of its Heinkels took off from Toul for Creil where each was loaded with ammunition containers: four internally and the fifth externally. These were dropped to German troops cut off on Hill 262 near Chambois. After this mission, the *Gruppe* moved back to Germany but other units continued similar operations for the next three nights. On the 22nd, some 250 kg of motor fuel, 18 x 250 kg and three x 1,000 kg ammunition containers and one with 1,000 kg of provisions were dropped near Broglie; in addition there was a 'concentrated raid' on Mantes and an attack on a target near Dreux. The II./LG 1 lost at least ten Ju 88 S-3s between 18 and 24 August alone, none of them surviving more than a month after its manufacture. Lost to light AA during the month, Ju 88 S-3 W.Nr. 330413 (coded +CP) had mottled grey-green top and sides and black lower surfaces while the tips of its spinners were yellow, the 6. *Staffel* colour.

On the night of 26/27 August, IX. *Fl.Kps.* was ordered to attack crossroads and supply routes around Sceaux on the south eastern outskirts of Paris. A mixed bomb load would be carried and the city centre was to be 'avoided at all costs' except by KG 30, flying from Le Culot, which was to drop leaflets. Some 111 bombers took part, reporting heavy concentrations of AA in the target area plus explosions, slow-spreading fires and secondary explosions of fuel or ammunition dumps; three machines broke off and two were lost. *Luftflotte* 3's situation report omits the bombs fell in several central districts of the newly liberated French capital. Next day, the *Luftflotte* reported that 'fighter and bomber formations have already found themselves unable to participate in operations due to lack of fuel.'

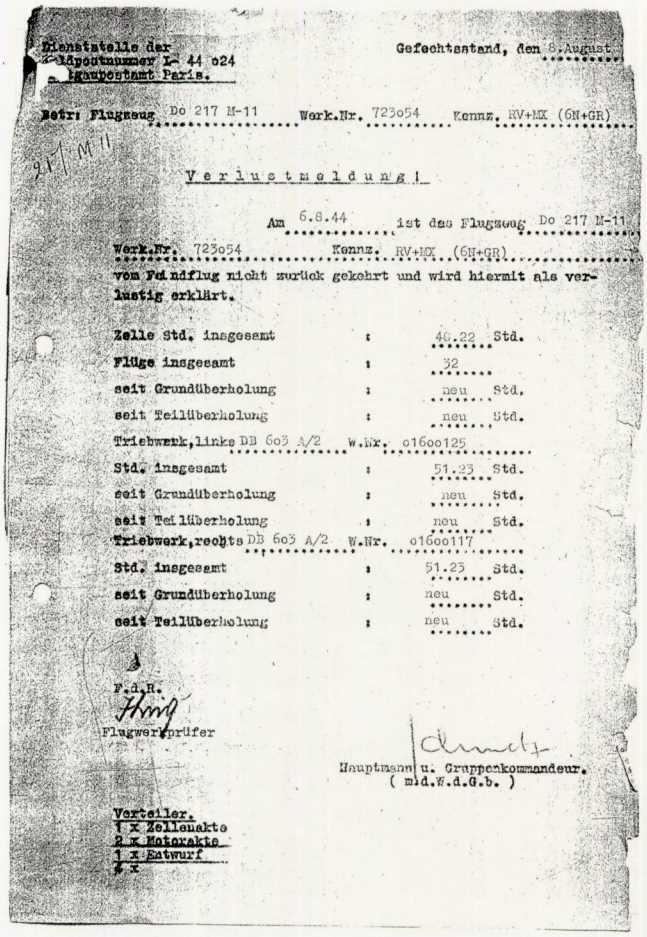
The following night's targets were bridges and arterial roads in Mélun: two aircraft aborted but 116 reached the objective, where: 'Bombs fell in the target area... Several large fires and heavy explosions with sheets of flame — presumably an ammunition dump — were observed.' Just one Ju 88 was lost, shot down by a night fighter over Chièvres airfield. On 29/30 August, IX. *Fl.Kps.* bombed Chalons sur Marne. On the 30th, with Allied troops uncomfortably close, 1./LG 1 was pulled out of Brussels-Melsbroek, the evacuation being marred by the crash of their *Kapitän's* Ju 88 S-3. *Oberleutnant* Sattler and five others crammed into the three-seat bomber were killed. Sattler had joined LG 1 four years earlier, his succession of honours culminating in the posthumous award of the Oakleaves to his *Ritterkreuz*.

BELOW: This Ju 88 A-4 coded M2+AK of 2./KGr 106 is being bombed up ready for a mission somewhere in France.

The Riviera Landings: August 1944

Over the summer, II./KG 26, part of 2. *Fl.Div.*, had gradually converted from torpedo to conventional bombing. Adapters to carry bombs had been slow to arrive and the aircraft lacked both bombsights and oxygen gear — items unnecessary on torpedo operations — so neither accuracy nor safer operating heights were attainable. On 14 August, orders were given that with immediate effect III./KG 26 with its *Stab*, 8. and 9. *Staffeln* was to transfer to Grossenbrode for conversion to the Ju 188. No air transport was available and so ground personnel were to go by road or public transport. The *Gruppe's* Ju 88s were to be ferried by their crews to Valence and/or Tavaux to bring II./KG 26 up to strength. Disbanded elements of KG 77 had also been used to boost KG 26's numbers. The 6./KG 77 remained at Istres but had apparently become 6.*(Beleuchter)*/KG 26 by 13 August, albeit without altering its unit markings, 6Z+_P (the individual letter being in black with a yellow outline).

KG 100 had been converting by stages to the He 177 in Germany and all its remaining Dornier *Staffeln* were concentrated into the III. *Gruppe* under *Hptm.* Heinrich Schmetz. Since May, 7. and 9./KG 100 had been training with the Hs 293 at Toulouse, with the 6. *Staffel* attached. Since 8./KG 100 was away on the He 177 conversion course, this arrangement had been made permanent in June and the 6. had been renamed as the new 8./KG 100. Severe losses over Normandy led to the disbandment of 9. *Staffel*, its crews and aircraft going to bolster the other two *Staffeln*, and Dorniers with overpainted 9. *Staffel* codes were found the Allies reached Toulouse (e.g. W.Nr. 4532, 6N+BS, formerly 6N+HT). On 30 July, the *Stab* and III. *Gruppe* had 25 (14) aircraft between them.



Dienststelle der Feldpostnummer L 44 024
Kampfstaffel Paris.

Gefechtsstand, den 8.August

Betr: Flugzeug Do 217 M-11 Werk.Nr. 723054 Kennz. RV+MX (6N+GR)

Verlustmeldung!

Am 6.8.44 ist das Flugzeug Do 217 M-11
Werk.Nr. 723054 Kennz. RV+MX (6N+GR)
vom Feindflug nicht zurück gekehrt und wird hiermit als verlustig erklärt.

Zelle Std. insgesamt	:	48.22 Std.
Flüge insgesamt	:	32
seit Grundüberholung	:	neu Std.
seit Teilüberholung	:	neu Std.
Triebwerk, links DB 603 A/2 W.Nr. 016oo125		
Std. insgesamt	:	51.25 Std.
seit Grundüberholung	:	neu Std.
seit Teilüberholung	:	neu Std.
Triebwerk, rechts DB 603 A/2 W.Nr. 016oo117		
Std. insgesamt	:	51.25 Std.
seit Grundüberholung	:	neu Std.
seit Teilüberholung	:	neu Std.

F.d.R.
Flugwerkprüfer

Hauptmann u. Gruppenkommandeur.
(m.d.W.d.G.b.)

Verteiler.
1 x Zellenakte
2 x Motorakte
1 x Entwurf
4 x

ABOVE: Form reporting the loss of a Do 217 M-11 on 6 August 1944, after 32 flights totalling over 48 hours. The aircraft was W.Nr. 723054, 6N+GR of 7./KG 100 and its factory code had been RV+MX. Lt. Hans Kieffer's crew were shot down by a night fighter and baled out during a mission to attack the bridge at Pontaubault with an Hs 293 glide bomb. The form is signed by Hptm. Heinrich Schmetz, Gruppenkommandeur of III./KG 100.

In mid-August, the *Geschwaderkommodore*, *Maj.* Bernhard Jope, left for a unit commanders' course in Germany; on the 15th, the Allies landed on the French Riviera. The *Luftwaffe* had intended that in the event of a landing, all available aircraft would bomb the invasion fleet at first light but the troops came ashore completely untroubled by air attack. That evening however, Do 217s approached Camel Beach and released glide bombs. LST 282 was 200 m off St. Raphael and heading for shore when she was hit and caught fire. Although beached, she was a total loss, with about 40 of those aboard killed. German guided weapons had sunk their last ship of the war and III./KG 100 had lost three Dorniers.

A few Ju 88s attacked shipping at dusk without result and only four from II./KG 26 operated: one broke off, two did not attack on account of the darkness and one bombed French Commandos at Cap Nègre. KG 26 concluded that while 2,000 m was not low enough for clear identification of small targets in the half-light, AA fire compelled the bombers to stay high: the targets were hard to see yet the bombers were easily visible from the ground.

Obergefreiter Gerds, III./KG 100

Wherever you went, you weren't allowed out alone. It was quite bad enough when they blew up... the last tram at night from Toulouse to the airfield and 45 soldiers were killed. After that an empty tram was always sent out in front.

The terrorists even had the nerve to occupy the railway station... our crew was supposed to attack it with two 250 kg bombs [but] the SS cleared it up later. You've no idea how things are seething down there. They killed a German General in Toulouse too...

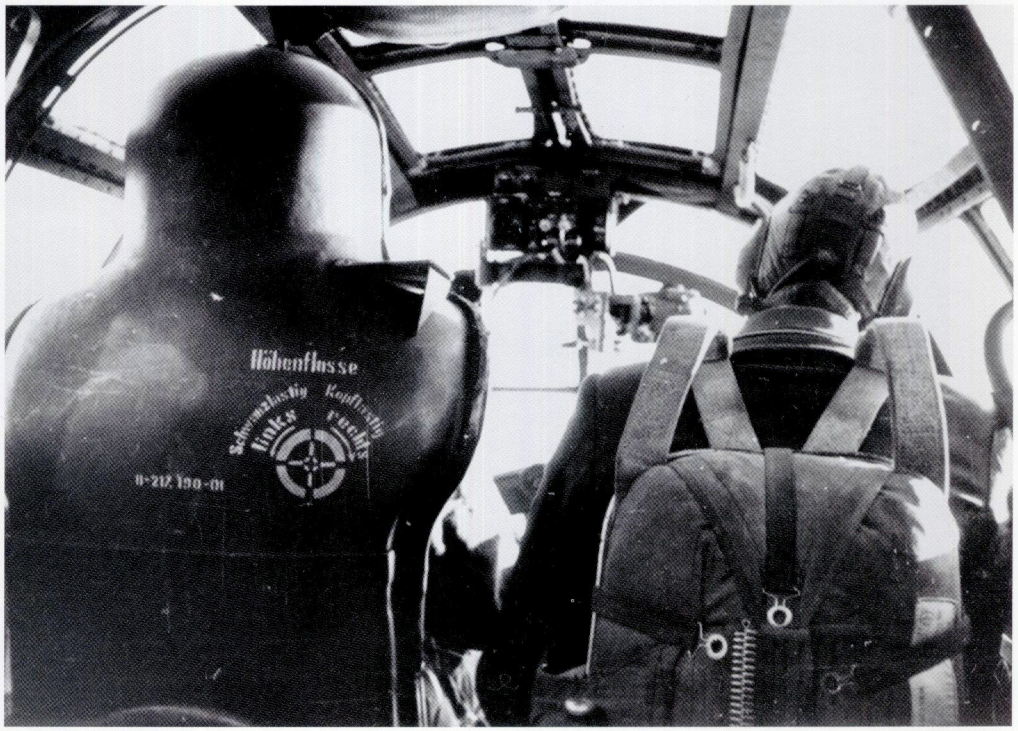
PoW 'bugged' by Combined Services Detailed Interrogation Centre

At 20.50 on the 16th, five Ju 88s approached St. Tropez port from 6,000 m, spread out and dropped anti-personnel bombs accurately into Allied concentrations along the beaches, killing 14 and wounding 36. The III./KG 100 approached from landward with only a brief warning period but achieved no hits; the crew of W.Nr. 6230, 6N+DR was frustrated by an unserviceable bomb-release but later managed to jettison their weapon. The next night, five Do 217s operated: two aborted the mission; another jettisoned its Hs 293 and two claimed near misses. Use of the *Fritz-X* was reportedly impossible on account of cloud cover, yet 6N+DR's crew claimed a near miss on a 6–8,000 tonne troop transport with the weapon. Just under an hour later the destroyer USS *Champlin* came under attack, this time from a low-flying Ju 88. Struck by the ship's return fire, the bomber exploded and I./KG 26 posted four airmen missing.

BELOW: Major Bernhard Jope, on the right, observes a mechanic at work on the port BMW 801 engine of his Do 217 E.

LEFT: Major Bernhard Jope was Geschwader Kommodore of KG 100 until mid August 1944 when he was sent back to Germany for a unit commander's course. He was born in Leipzig on 10 May 1914 and in the 1930s became a Lufthansa pilot. At the outbreak of the Second World War he joined 2./KG 40 in which he flew operational missions over Poland, France and England flying the Fw 200. His unit was transferred to the South of France where it carried out flights over the Atlantic in co-operation with German Navy U-boats. On 24 October 1941 he severely damaged the British troop ship 'Empress of Britain' for which he was awarded the Ritterkreuz on 30 December 1941. He was transferred to KG 100 where he later became Kommodore and on 24 March 1944 received the Eichenlaube. Some time late in 1944 he was promoted to Oberstleutnant and transferred as Kommodore to KG 30 until the end of the war.

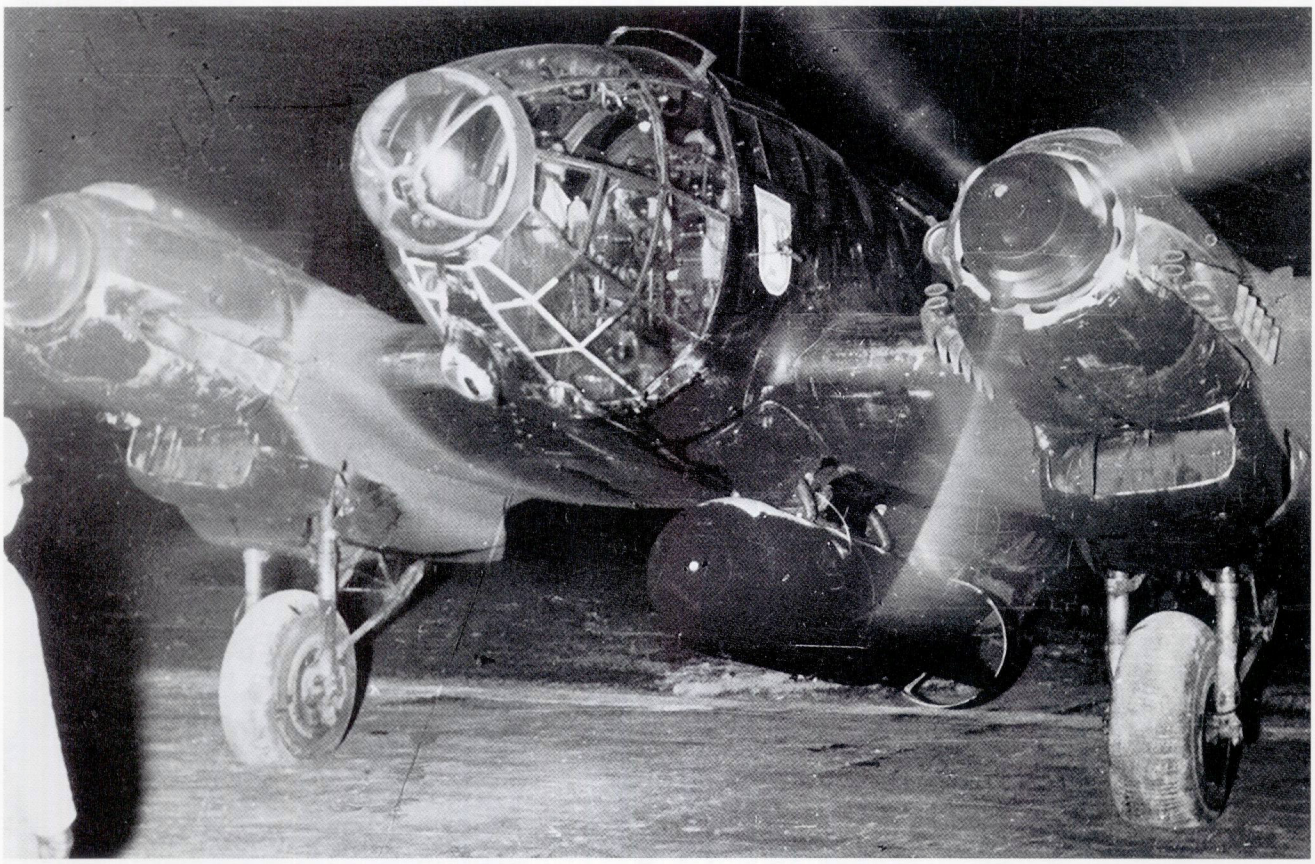
BELOW: This internal cockpit view taken inside a Do 217 K, looking forward shows the back of the pilot's armour protected seat.



Summer 1943-May 1945

On the 18th, 2. *Fl.Div.* was subordinated to *Luftflotte* 2 with immediate effect and flying units were ordered to prepare for transfer. Dusk saw what the RAF's Air Historical Branch characterised as the 'last serious effort' by the *Division's* bombers. A prisoner later told how III./KG 100's Dorniers were bombed up and ready for their evening mission when word came that the airfield was to be evacuated and the *Gruppe* would return to Germany. A Ju 88 attempted to torpedo Fighter Direction Tender 13 off Delta Beach but the weapon exploded 250 m short. Another Junkers dropped anti-personnel bombs on the same beach from 2,000 m.

Eleven Ju 88s attacked around St. Tropez while five passed over Camel and Delta Beaches. At 21.05 hrs, one of these came as close to seriously impeding the Allied effort as any *Luftwaffe* aircraft would, straddling USS *Catoctin*, flagship of the Allied Naval Commander, with anti-personnel bombs: two hit, killing six and wounding 42. At 23.00 hrs, 2. *Fl.Div.* reported that 11 aircraft had taken off and attacked their designated targets. Of three setting down at Valence, two had belly landed after being shot up; three more landed at Montélimar; and five at Orange-Plan de Dieu. There were no more bomber missions against the landings since the *Luftwaffe* was leaving Southern France, 36 Ju 88s of I. and II./KG 26 having arrived in Memmingen and München-Riem by midday on 21 August.



2. *Fliegerdivision* bomber units, afternoon of 18 August 1944

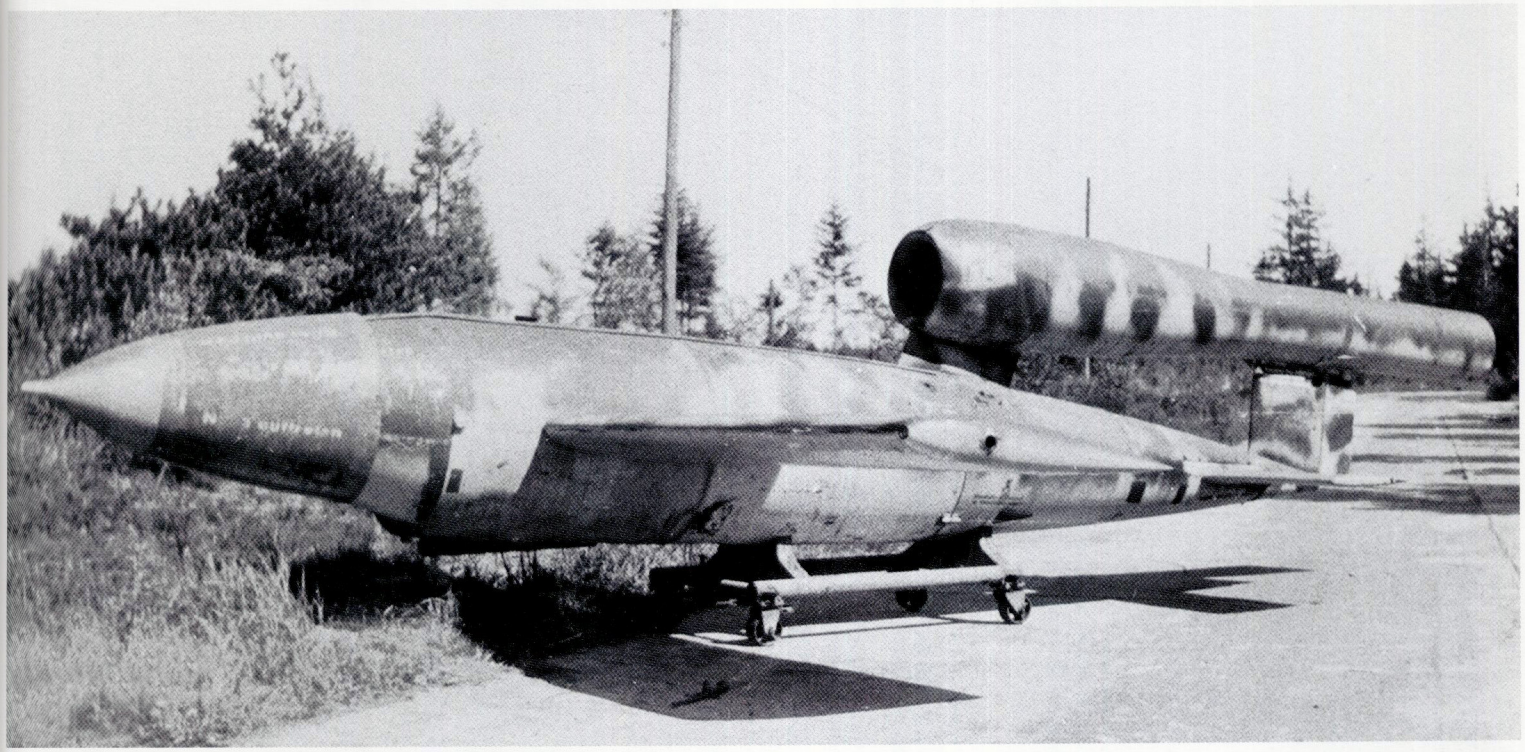
Unit	Aircraft		Base
Stab KG 26	1	(1)	Valence
I./KG 26	33	(9)	Orange Plan-de-Dieu
II./KG 26	36	(23)	Valence*
Stab KG 100	2	(1)	
III./KG 100	13	(8)	Toulouse

*strength for 17th; by 19 August the *Gruppe* reported only 23 (14)

ABOVE: A fully loaded He 111 H-6 from Stab KG 26 with an SC 1200 bomb under the fuselage this heads out on a mission. The aircraft has its undersurfaces painted black, as has the bomb. The famous KG 26 emblem is painted on the nose with the lion being painted white on green background.

Flying Bombs

July 1944–January 1945



ABOVE: At the end of the war a large number of V-1 flying bombs were found stored in the Karlumer storage depot near Leck, which were intended to be used by KG 53 in its air-launch operations against the British Isles.

The III./KG 3 had spent May and June 1944 at the Karlshagen experimental establishment, converting to the air-launching of V-1s. As we have seen, operations against London began on the night of 7/8 July, just over three weeks after the first ground firings. On 10, 13 and 14 July, attention had switched to Southampton — a principal supply port for the forces in Normandy — with a total of 63 bombs launched and barely a hit scored. In German signals, London was often referred to simply as 'Main Target' and the nine subsequent operational nights in July were devoted to the British capital. After the opening, tentative mission, between 14 and 31 bombs were launched each night, limited strength sometimes being offset by repeat sorties as on 29/30 July when 13 Heinkels released 30 V-1s.

In early September, as the Dutch airfields appeared threatened, the *Gruppe* withdrew to Hesepe, Ahlhorn and Varrelbusch on home soil. On the 17th, Varrelbusch was informed that an aircraft of 9./KG 3 had been shot up and ditched in Lake Blassemer near Leyden, Holland that morning. This may have been 'friendly fire' for three days later an investigation was ordered into no fewer than nine instances over two nights of He 111s flying at 50–150 m being fired upon by German light *Flak*, with one brought down in flames. Losses to all causes were such that on the 25th, a report to *Luftflotte Reich* cited a 'sharp drop' in III./KG 3 serviceability, the unit possessing 'not even a quarter' of its aircraft establishment. The flying bombs were aimed at specific co-ordinates but the weapon's inherent inaccuracy was compounded by inadequate data for forecasting winds and difficulties in finding the correct launch point. The Heinkels were aided by a network of radio beacons but these were jammed by the Allies and an alternative was for I./KG 66 pathfinders to place sea markers on the desired spot.

While He 111s converted to the air-launch role (by the *Deutsche Lufthansa* workshops at Stuttgart-Böblingen) are commonly referred to as H-22 models, their operators thought otherwise. On 6 October, III./KG 3 reported a strength of 24 (10) aircraft; one He 111 H-20 was missing, an He 111 H-16 was damaged on landing and an H-11 through being shot up. That evening, a four-engined aircraft crashed on the power line supplying Varrelbusch, the lighting system failed and the Heinkels were forced to land elsewhere. Electricity was restored in time for 11 aircraft to operate on the evening of the 7th, although a planned second mission was prevented by ground mist and one machine was reported overdue next morning.

IA, Ops to Gefechtsverband Hallensleben (IA, Ops) IC: Report on results of night operation of 28/29 September:

1. Target: London.
2. Areas of release: Squares 4325 and 4364.
3. Times of release: 04.00 to 04.32 hours.
4. Aircraft employed: 9
5. Releases: 9, including

(A) Released at target: 6.
(B) Failures: 1 (not on full boost).
(C) Emergency releases: none.
(D) Not observed: 2 crews missing.

6. Defence: none.
7. Losses: 2 crews. 2 aircraft (including 1 Staffelkapitän's crew).
8. Special events:

(A) At 04.19 hours 1 aircraft crashed in Square 2365, flames at point of impact being observed by 2 crews, followed by firing of red distress signals (thought to be the missing Staffelkapitän's crew).
(B) At 04.02 hours in Square 335, 3 red Verey lights observed (thought to be 2nd missing crew).
(C) At 03.15 hours in square 5344 red Verey lights were observed.
(D) At 03.48 hours in square 5487 a fire was observed (thought to be the scene of an a/c crash).
(E) 1 crew, reported as missing in the report of 26 September, crashed at Hankenberge, about 15km south-east of Osnabrück. Aircraft completely destroyed, crew killed.
(F) 1 aircraft did not take part in the operation owing to engine trouble at take-off.

RAF countermeasures included night fighter patrols over the North Sea, intruder sorties over the Heinkels' airfields and the conversion of a Coastal Command Wellington to the world's first Airborne Warning and Control (AWACS) platform. For the Mosquito crews, the strain of low-level night flying over water was such that they were restricted to a three-month tour on this particular duty. The III./KG 3's losses over just ten days in October were:

07.10.44	8./KG 3	one missing from operations
12.10.44	7./KG 3	one crashed on take-off at Varrelbusch
14.10.44	7./KG 3	one crashed at Telgte, 15 km from Münster, cause unknown
	9./KG 3	one crashed on take-off at Varrelbusch
	7./KG 3	one crashed on landing at Münster-Handorf
16.10.44	8./KG 3	one crashed on landing at Münster-Handorf

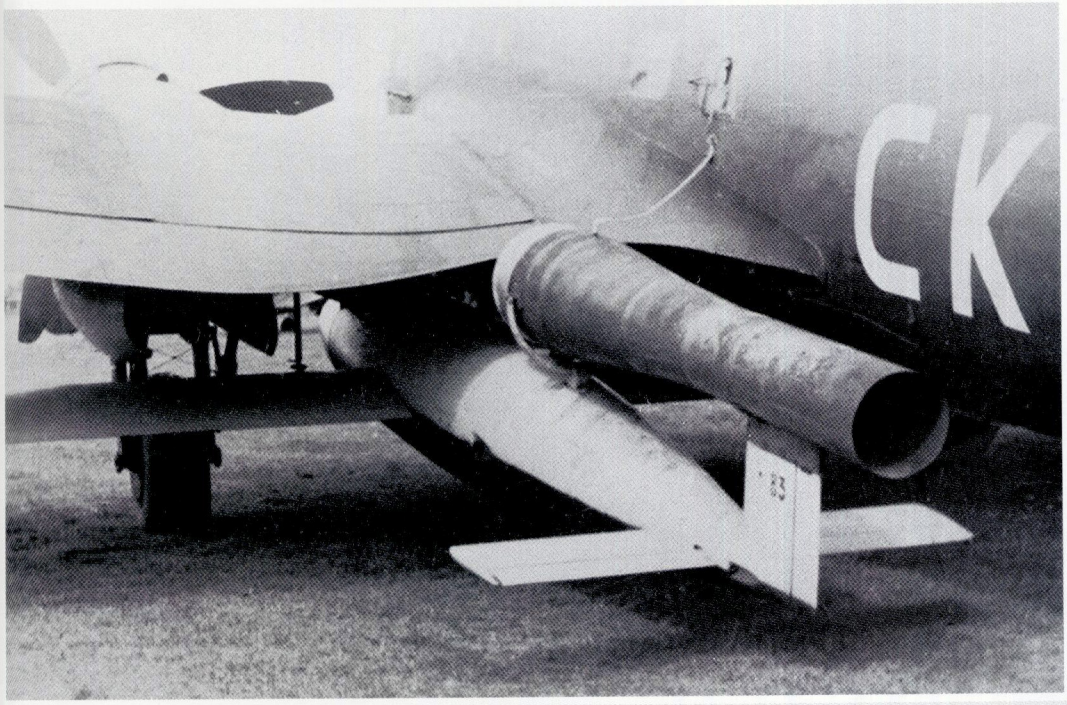
LEFT:
He 111 H-16s of KG 53, fitted with V-1 flying bombs stand ready for operations, on a rain and windswept hard-standing in Schleswig-Holstein in northern Germany. Flame dampers have been fitted over the engine exhausts to protect the aircraft from being spotted during night operations.

Summer 1943-May 1945

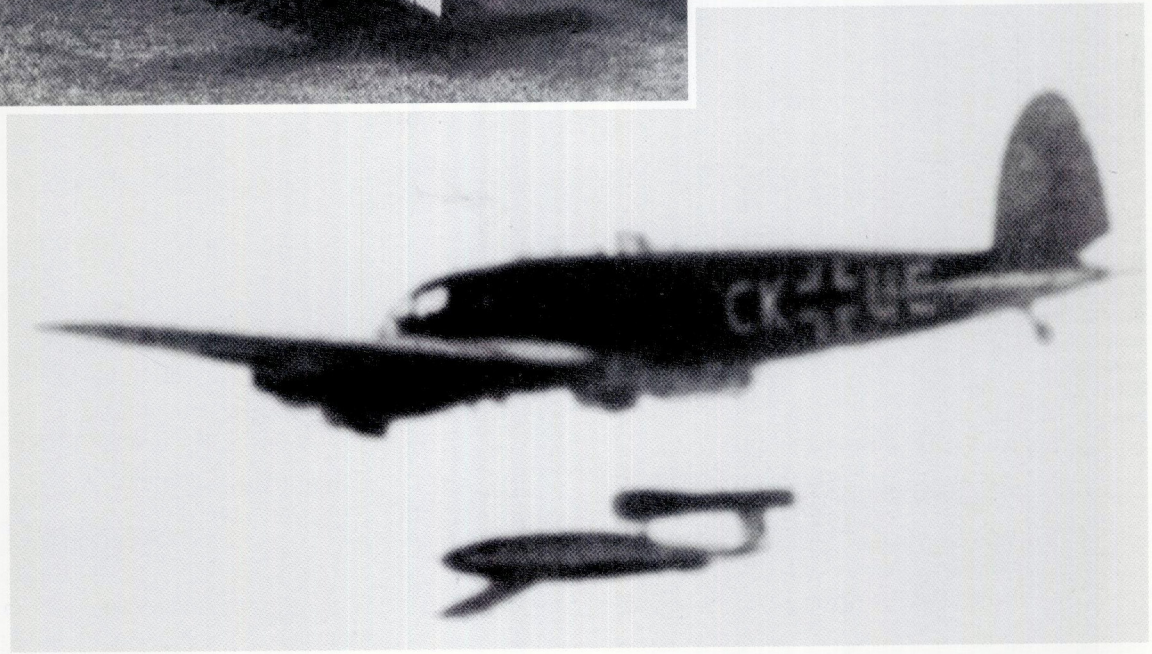
By October preparations were well advanced to expand the force to a full *Geschwader*. KG 53 was to take over, with III./KG 3 becoming its new I. *Gruppe*. KG 53 began operations in the last week of the month: the *Staffeln* of I./KG 53 were split between Hesepe, Ahlhorn and Varrelbusch; the II. *Gruppe* was at Marx and the III. at Schleswig.

On 9 November, the *Kommodore* was planning to test the range of *Zyklop* (Cyclops) radio beacons in low altitude flight, in the hope that favourable results would allow crews to calculate and compensate for wind between their initial and launch points (about 120–150 km apart). By the middle of the month, the fuel situation had become so bad that KG 53 was ordered to restrict operations to a maximum of 20 aircraft at a time. Not only fuel was in short supply that November: on the 11th, the *Geschwader* was ordered to experiment with *Düppel* on operations, sparingly for it was no longer being manufactured. A week later, III. *Gruppe* requested an extra meat ration for aircrew operating against the Allies and on the 29th, I./KG 53 sought 20 mountings for 2cm Oerlikon guns, 'urgently required' to develop *Flak* defences on the three airfields occupied by its *Staffeln*.

After the summer, only once was a target other than London selected: on 24 December, around 50 Heinkels launched their V-1s from over the North Sea against Manchester, just one bomb hitting the city. Sporadic operations against London were resumed but ceased altogether after 14 January 1945 in the face of worsening fuel shortages.
On 25 March, 14. *Fl.Div.* reported 58 pilots of KG 53 available for conversion to the Me 262.



LEFT: A close-up of a He 111 H-16, coded CK+UE, was converted to carry the Fi 103 (V-1) for flight trials at the Luftwaffe's weapons testing centre at Karlshagen. Several test flights were made and the aircraft is seen here fitted with Fi 103 V83 under the port wing.



RIGHT: The Fi 103 V90 (V-1) is air launched from the He 111 coded CK+UE, during a test flight at Karlshagen on 7 September 1943.

ABOVE: Ju 188 A-2s of I./KG 66 carried out night operations against the British Isles during August 1944. This aircraft has an MG 151 defensive armament fitted in the nose and upper turret. Note also the 'Kuto Nase' (cable cutting blade) fitted to the glazed nose, which was introduced as a defence against barrage balloons.

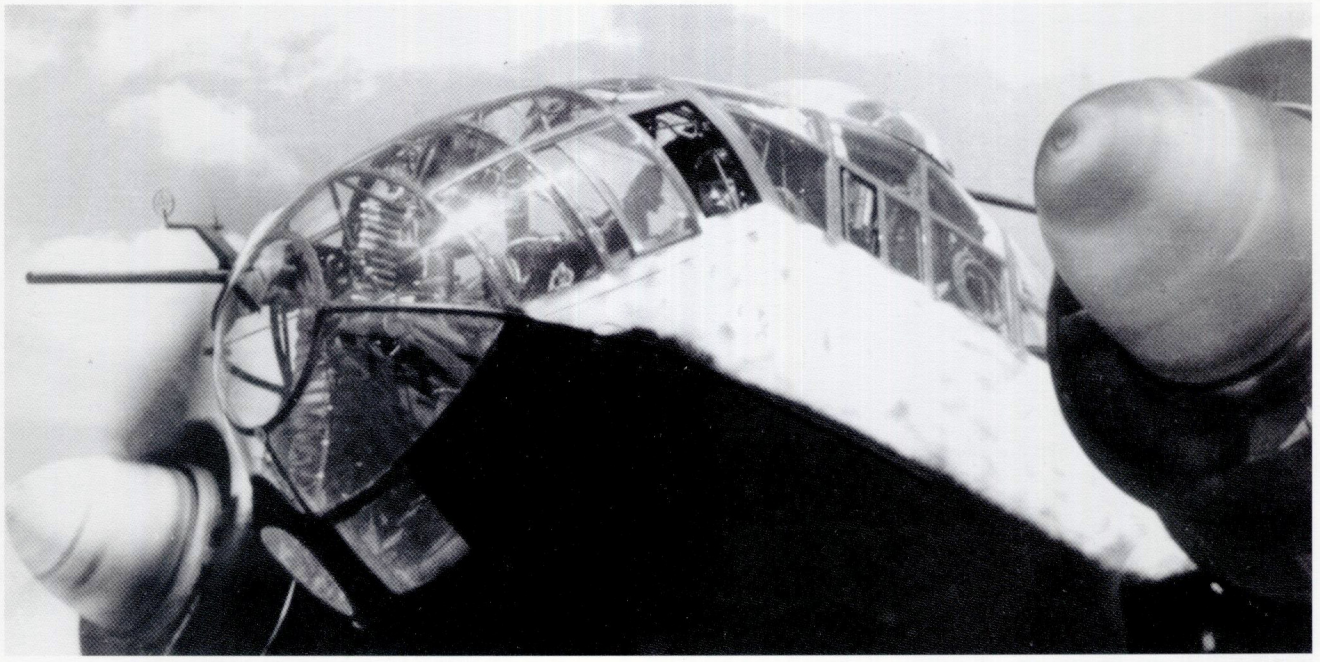
The Western Front

September–December 1944

The *Luftwaffe* had been driven from France's soil but not yet its skies and on 1/2 September, 73 aircraft of IX. *Fliegerkorps* bombed Verdun. Most of the bombs were reported as falling in the built-up area and there were heavy explosions and a large mushroom of smoke west of the target. Another ten machines raided Ste. Menehould and even at this late stage 15 attacked ships in the Orne Estuary. The following night, 23 machines flew a second mission against Verdun and on the night of 3/4 September, 43 sorties were dispatched to Toul.

On 7 September, *Luftflotte* 3 ordered IX. *Fl.Kps.* and the following subordinated units to withdraw to airfields in the *Reich* with immediate effect: *Stab*, I. and II./KG 2; *Stab*, I., II. and III./KG 6; *Stab*, I. and II./KG 30; *Stab*, I. and II./LG 1; and I./KG 66. The III./KG 3 was ordered to Hesepe and *Stab* LG 1 was subordinated to *Luftflotte* 3, styled *Gefechtsverband* Helbig (after LG 1's *Kommodore*,) and given command of: III./KG 51, NSG 2, *Einsatzkommando* I./KG 51 and the remaining units of *Einsatzgruppe* KG 101. A week later, I./KG 66 was asking for all stragglers to be sent to Dedelstorf where they were urgently required at the *Gruppe's* new operational station.

Luftflotte 3's orders for the night of 13/14 September included: '1./KG 101 ... attack with all available composite aircraft on Albert Canal bridge at Beeringen. III./KG 51 on Meuse road bridge 4 km north west of Neerpelt.' On the 17th, the Allies launched Operation Market-Garden, the ground and airborne offensive to capture the Rhine bridge at Arnhem. Next day, OKL decreed that:



ABOVE: A close-up view showing the nose of a Ju 188 C running up its two Jumo 213 engines. The defensive nose armament and upper gun turret composed MG 151 cannon. This aircraft was also painted in RLM 76 and 22, but the upper surfaces also had a light mottle of 76.

'IX. Fliegerkorps with LG 1, I. and II./LG 1; KG 26 with I. and II./KG 26 and 7./KG 2 as well as battle unit consisting of III./KG 51, NSG 2 and Special Detachment Schenck (the latter to be speedily reinforced) to be employed in closest concentration and in collaboration with OB West to combat Allied landings from the air.'

BELOW: The crew of a Ju 188 E-2 of I./KG 66 make final preparations for a mission.

The 7./KG 26, converting to the Ju 188 in Grossenbrode, was also assigned to IX. *Fl.Kps.* for use against the landings. On the night of the 18th — alongside elements of LG 1, KG 30 and KG 66 — I./KG 2 sent 12 Do 217s from Münster-Handorf to attack the British bridgehead over the Meuse-Escaut Canal at Neerpelt. Four crews did not locate the target, the remainder dropped 32 x AB 250 and AB 500 canisters. Their bombing was scattered but greater success was achieved the following night when 78 aircraft, from LG 1, KG 30, KG 54 and I./KG 2, set out to make a 'concentrated attack' on Eindhoven. A Do 217 crashed soon after take-off and its crew were killed but 75 machines bombed the objective, one attacked a secondary target and another broke off. The bombers hit an ammunition convoy, shattering the city centre and killing or injuring over 1,000 people. KG 2's Dorniers had carried 28 x SC 500, 4 x SD 250 and 7 x AB 500/1, bombing had been concentrated and the resulting fires were still visible to German fighters next day. This was to be IX. *Fliegerkorps'* swansong, for its disbandment — and KG 2's — had already been ordered.

On the evening of the 18th, *Luftflotte* 3 altered the command structure yet again: *Stab* KG 6 was to replace *Stab* LG 1 in control of the *Gefechtsverband*. which would now take the name of KG 6 *Kommodore*, *Obstlt.* Hermann Hogeback. Two days later, *Luftwaffenkommando West* (successor to *Luftflotte* 3) elected to substitute *Stab* KG 2 and the resulting *Gefechtsverband Hallensleben* would remain in being until 15 March 1945.

Summer 1943-May 1945

RIGHT: This Ju 188, A3+MD was a spy-dropping aircraft of 4./KG 200's Kommando Olga and was found by the Allies at Rhein-Main. This is almost certainly the same A3+MD which was belly-landed there in mid-January 1945 by Obgfr. Heinz Hauck and put out of action. Its camouflage is the common pale meander pattern and the underside pale blue with a dark meander. (Another of the Kommando's Ju 188s was recorded by Allied Intelligence as having black undersides and a light green meander over 'blue/grey/mauve' on the upper surfaces). Markings are unusual in several respects. The unit code is in small white characters; the individual letter 'M' appears as a white outline and is somewhat larger although far from the normal size. The 'D' (which in KG 200 denoted the 4. Staffel) is also white and similar in size to the internal dimensions of the 'M.' A female civilian is retrieving something from beneath the starboard wing root.

Disbandment

KG 2's assets were distributed around the *Luftwaffe*, with most of its pilots destined for the fighter arm but not all would end up there. *Fw.* Kurt Wuttge:

> *'...one day, word went round that the Geschwader was to be disbanded; entire Staffeln were to go to the Paratroops, SS, infantry, every possible place. One fine day, all the pilots* [were] *off to Berlin... there were sill the observers, wireless operators and gunners. All the ground echelon went to Königsberg, they were supposed to take over as ground crew of a Jagdgruppe. We came to Quedlinburg* [Aircrew Assembly Depot].'

Within a week, Wuttge was part of a new crew collecting a Ju 188 from Rangsdorf and was posted to Rhein-Main, trading 'that rather dreary *Geschwader* KG 2' (as their interrogator later described it) for *Kommando Olga*, a detachment of 4./KG 200 parachuting agents behind Allied lines in the west. Wuttge's pilot, *Obgfr.* Heinz Hauck recalled:

> *'...our first, comical [spy dropping] mission. I thought, "they'll have a reason for all this secrecy, don't worry about it." I sat myself in my plane and my mates climbed in. We flew there, did our utmost, it didn't work. Turned back, landed. We'd never heard anything about it ... no one told us anything. I didn't even get told [the drop zone]; only the navigator got that, I didn't know where we were.'*

Their new assignment had its compensations however:

> *'Right up to the last, whether we flew or not, we got a daily ration of half a litre of milk, an egg, biscuits, chocolate, 60 grams of butter as flying rations and another 100 grams of butter at night... and 200 grams of sausage.'*

ULTRA decrypts

HP 2583
Strength return ... evening 5 [October] from III./KG 66. Aircraft: 14 (0) (Comment: type unknown) and 7 (4) crews; 10 (6) Ju 88s and 14 (10) crews

HP 3875
Luftwaffenkommando West orders late 18 [October] ... Two Staffeln of I./KG 66 to Handorf. One Staffel to remain in Dedelsdorf for supplementary equipping with an apparatus (Nachtfee). Comment: ... first Gruppe KG 66 at Dedelsdorf 14 September... specialises in pathfinding ...

HP 4667
... evening 26 [October], Luftwaffenkommando West ordered preparation by I. and III./KG 66 of concentrated operation with all serviceable aircraft on Kruisschans Sluice, Antwerp (comment: at entry from Scheldt to new docks about 5 miles north west of Antwerp) in such a way that attack could take place on cover word ... Kreuzzug in the first suitable weather in the bright moonlight period. Loading: only heaviest bombs ... except for target indicator(s) and composite aircraft" ... on 13th, III./KG 66 had 11 (4) Ju 88 and 15 of unknown type...

On the night of 26/27 September, 42 Fw 190s of III./KG 51 set out in two groups to attack bridges leading into Eindhoven: five aborted and one went missing. Attacking the same bridges were four *Misteln* and eight Ju 88s of KG 101: one *Mistel* and two Ju 88s broke off for technical reasons and a Ju 88 S went missing. On the 28th, seven *Sonderverband Einhorn* Fw 190s dropped KG 200's first bombs in anger in a dawn attack on the bridges, claiming a direct hit on each but Spitfires of No. 411 Squadron RCAF shot down *Lt.* Herbert Leschanz's Fw 190 F-8, killing the 30 year-old Austrian pilot. On 3 October, *Gefechtsverband Hallensleben* requested visual reconnaissance of Eindhoven aerodrome and its dispersals and ordered a two-wave attack that night by III./KG 51 and NSG 2, aimed at aircraft parked on the runway. In addition, III./KG 3 was to attack the 'main target', London. At dusk, III./KG 66 (as 2./KG 101 had just become) would launch its *Misteln* at the Nijmegen bridges.

RIGHT: This Me 262 A-2a of Kommando Schenck based at Rheine in 1944 is undergoing undercarriage tests and has still to be fitted with a bomb rack.

The Me 262

The Me 262 had entered service as a *Blitzbomber* over France in the last days of July, too late to catch the invaders coming ashore and too few in numbers to make any real difference. The first unit to see action was a *Kommando* of I./KG 51 led by *Maj.* Wolfgang Schenck, from whom it took its name. Deployed initially to Châteaudun, its strength was minimal (usually about six serviceable machines). To reduce the chances of their being hit by ground fire and falling into Allied hands, the jets were forbidden to descend below 4,000 m over enemy territory, leaving this supposed fast attack bomber marooned at medium bomber altitude with no means of accurate aiming. As early as 5 September, *Luftflotte* 3 was urgently requesting OKL Operations Staff to countermand the order 'as it usually excludes operations by this aircraft in present weather conditions.' Little wonder then that the loads most often carried seem to have been AB canisters, to strew bomblets across area targets such as Allied airfields. The *Kommando* was in action against the attempt to seize the bridge at Arnhem, attacking Dutch and Belgian towns, British crossings over the Albert Canal at Beeringen and gliders on the dropzones, while III./KG 51's Fw 190s raided the same targets by night.

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ABOVE: Major (here still as an Oberleutnant) Wolfgang 'Bombo' Schenck was born in South West Africa (now Namibia) on 7 February 1913. He joined the Luftwaffe in 1936 and first served with I./JG 1 but was transferred to I./ZG 1 for the campaign against Poland, Norway and France. On 16 May 1940 he was shot down and badly injured by an RAF Hurricane and after recovery was promoted to Staffelkapitän of 1./Erprobungsgruppe 210. The unit was renamed 1./SKG 210 in April 1941, and later took part in the invasion of Russia. On 16 August 1941 he was awarded the Ritterkreuz and a month later was sent to Rechlin to take over Erprobungstaffel 210 and given the task of introducing the Me 210 into operational service. He continued in various experimental tasks during which he was awarded the Eichenlaube on 30 October 1942. Because of his wide experience, in March 1944 he became technical advisor in the Luftwaffe's Technisches Amt (Technical Department) and in June 1944 was made responsible for Me 262 bombing trials with the unit being given the name Kommando Schenck. He flew a total of 300 combat missions and achieved 18 victories.

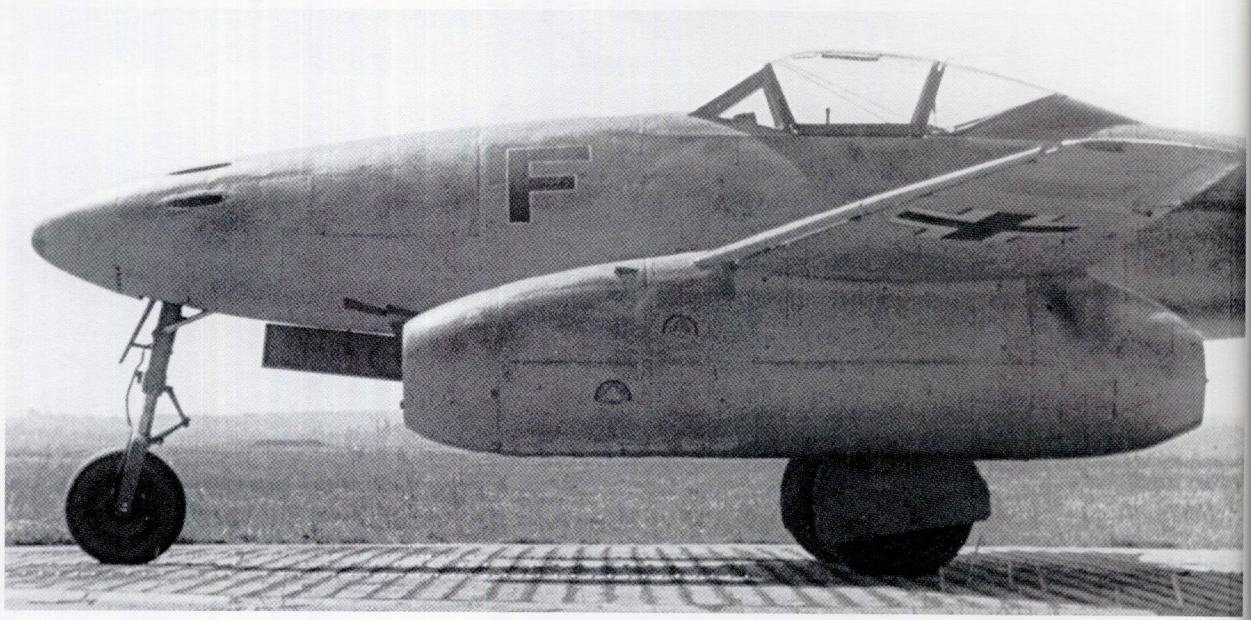
As summer turned to autumn, *Kommando Schenck* was reabsorbed into I./KG 51 and something like full *Gruppe* strength was being reported. The reasons behind the delay in introducing the Me 262 into service have been debated *ad nauseam* but even on the front line problems emerged. This message from *Luftflotte* 3 offers one example:

> *'OKL Operations Staff and OKL QMG are requested to despatch an experienced radio specialist acquainted with the Me 262, as radio installations on practically every aircraft broke down during Ops Detachment I./KG 51 operations on 8 and 9 September. On both days an aircraft was lost, radio communication breaking down just as it was approaching the target area. A radio specialist from a Night Fighter Geschwader based in Rheine was unable to establish the causes of the breakdown.'*

Shortly afterward, 3./KG 51 submitted an accident report on four bad landings by Me 262s at Rheine following operational flights on 26 and 27 September and 2 October. On the 4th, five operations were flown, comprising eight sorties against Nijmegen, one against Volkel and three to Grave. Two SC 250, 18 x SC 250 and two SD 500 were dropped through gaps in clouds and there were no losses, despite sightings of Spitfires and Tempests in the target areas. On the 5th, a 3. *Staffel* aircraft returned from a sortie with its bombs aboard, tried to jettison them and crashed at Nordhorn, killing its pilot; another Me 262 was badly damaged while landing and its pilot slightly injured; and Typhoons attacked Rheine, cratering the runway. At dawn two days later, three out of seven aircraft were serviceable and there were three sorties to the Nijmegen area; two against Grave airfield and two to Volkel. Operations were impeded by bad visibility and an air raid warning, while a machine suffered minor damage from well-aimed AA. It was decided to postpone the next day's attacks until four Me 262s could again be made serviceable.

> *'Battle Unit Hallensleben to Ops Detachment Schenck on 20th [October]: by order of Göring, when attacking small particularly important targets, the previous bombing height of 4,000 m. might be reduced. For large area targets bombing height to be determined after taking into consideration light AA defence.'*

On 7 November, *Luftwaffenkommando West* ordered I./KG 51 to cease attacking airfields and concentrate exclusively on occupied towns and villages designated by Army Group B. On the 20th, the *Gruppe* reported that 12 of its 47 aircraft were the four-cannon model but that two guns had been removed 'for the moment' to save weight. (The Ar 234 was having weight problems too. Ten days previously, III./KG 76 had reported that for technical reasons its jets could only carry a 500 kg bombload). By mid-December, II./KG 51 was being told to fit all four cannon and two bomb racks but no armour plate. During the winter, *Luftwaffenkommando West*, urging economy, pointed out that an Me 262 burned 200 litres of fuel in just five minutes' taxiing under its own power.

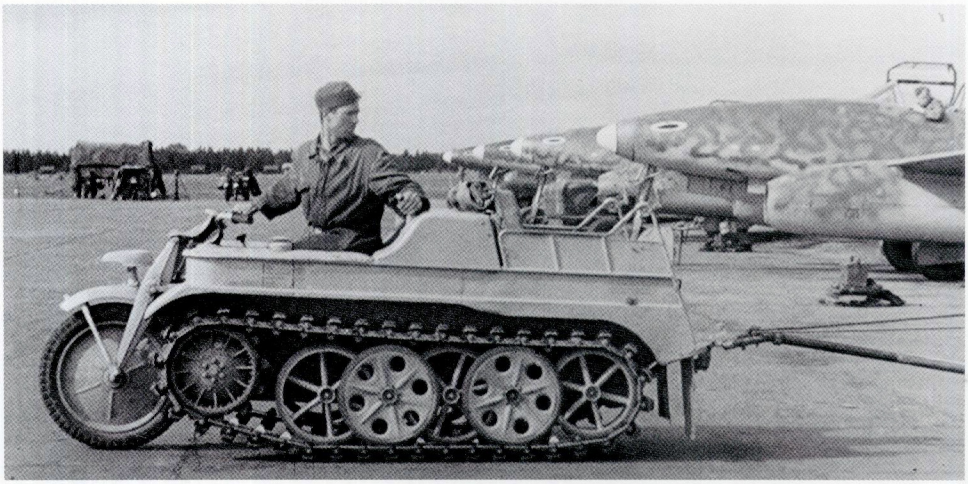


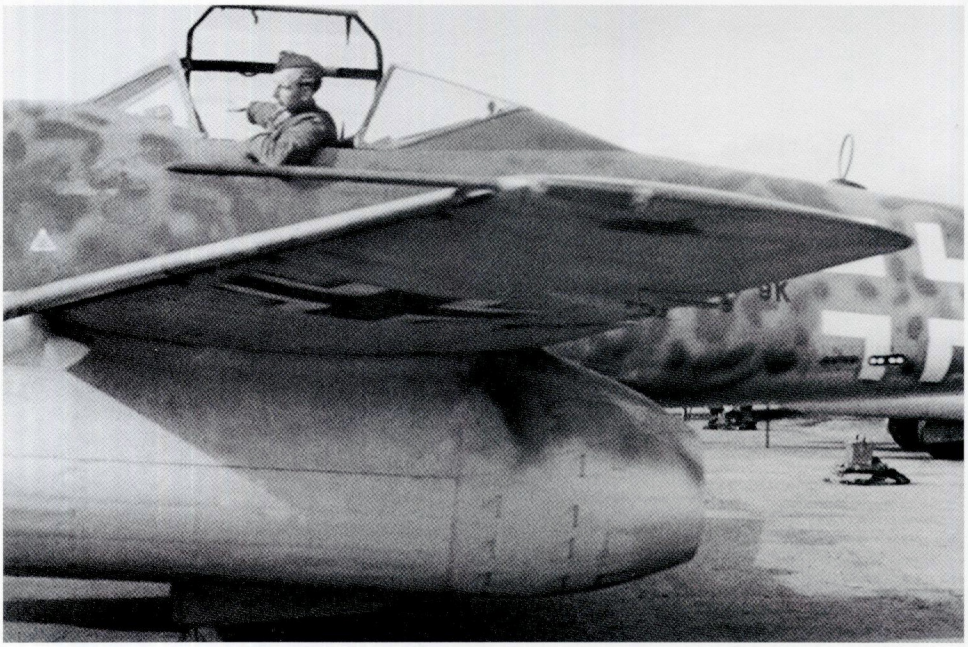
Messerschmitt Me 262 A-2a 'Black F', W.Nr. 130079 of Kommando Schenck, Lechfeld July 1944
The Me 262s of the first jet bomber unit carried black letters outlined in white on the fuselage forward of the cockpit. The aircraft were painted dark grey RLM 74 and medium grey RLM 75 on the uppersurfaces and pale blue grey RLM 76 underneath. 'Black F' also had a red tip in RLM 23 to its nose.

OPPOSITE BOTTOM AND RIGHT: Two photographs taken in July 1944 of Me 262 A-2a, W.Nr. 130179, 'Black F' of Kommando Schenck during bombing trials. This machine was fitted with a single early ETC 503 bomb rack, which was found to be aerodynamically unsuitable for the speed of the aircraft as severe vibration was encountered during flight test using concrete trial bombs. The exterior shape of the bomb rack was re-designed by Messerschmitt AG and became known as the 'Wikingerschiff', which was later fitted to most Me 262 A-1as.

Summer 1943-May 1945

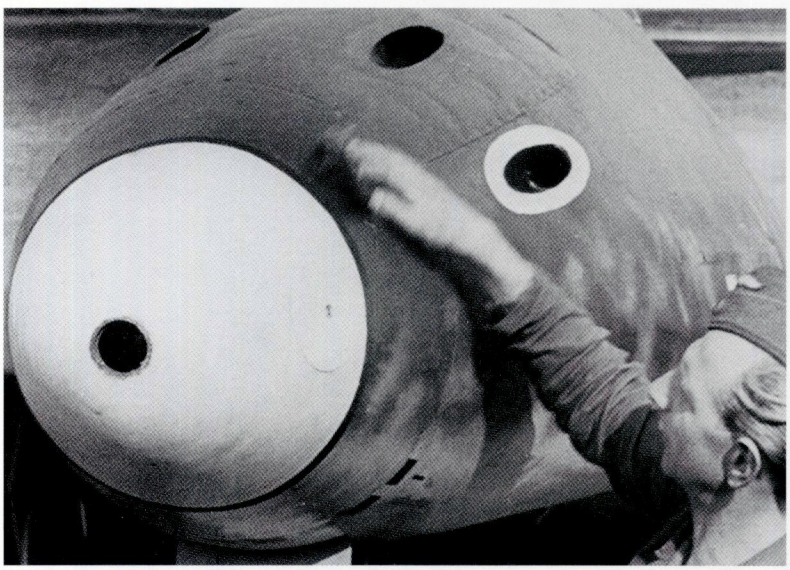
RIGHT, MIDDLE RIGHT AND OPPOSITE: A scene at Rheine in the autumn of 1944 shows a Kettenkrad towing a Me 262 A-2a of 1./KG 51, W.Nr. 170096, coded 9K+BH from a line-up after servicing.



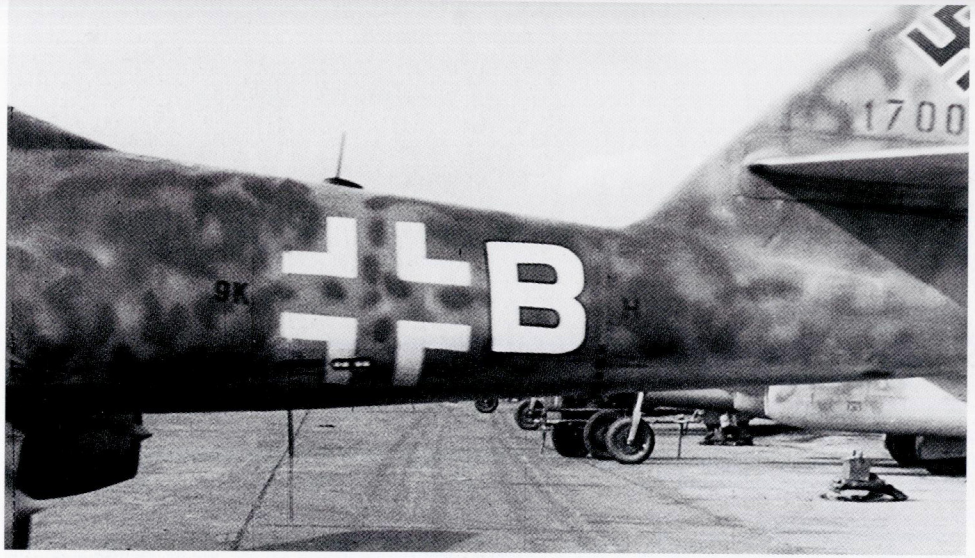


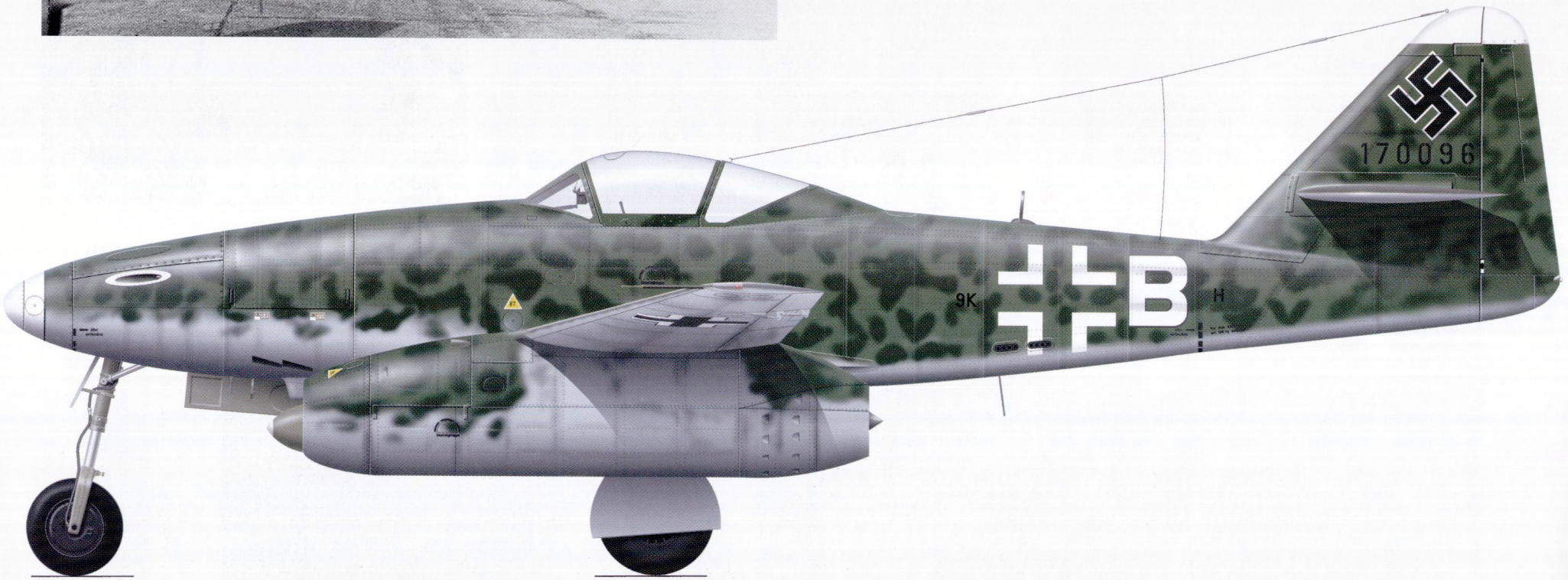
ABOVE: Hptm. Rudolf Abrahamczik takes advantage of the hot engine exhaust to warm his hands from an Me 262 Jumo 004 engine. The small unit code 9K, can be seen painted in black in front of the fuselage cross. Abrahamczik, a former bomber pilot, flew ground attack missions in the Me 262 over Prague with Gefechtsverband Hogeback during the final days of the war.

LEFT: The Gruppenkommandeur of I./KG 51, Major Heinz Unrau (right) enjoys a joke with fellow officers, Hptm. Rudolf Roesch (centre) with Ritterkreuz, and Leutnant Masser at Rheine-Bentlage in 1944. Roesch was reported missing while on a meteorological reconnaissance flight west of Helmond in Holland on 28 November 1944. The aircraft in the background is Me 262 A-2a, W.Nr. 170096, 'White B'.



RIGHT: A close-up of the nose of an Me 262 A-2a of 1./KG 51. Although the standard Me 262 A-1a fighter was fitted with four MK 108 cannon, the bomber versions had the upper guns removed to save weight and the 'live' gun ports were indicated by painting a white line around the port is clearly shown here. The aircraft also carries the 1. Staffel colour of white on the tip of the nose cone followed by a thin black line. Aircraft of the 2. and 3. Staffel were painted similarly in black and yellow respectively. The glazed port at the extreme nose is for the BSK 16 gun camera.





Messerschmitt Me 262 A-2a, W.Nr. 170096 of 1./KG 51, Rheine, September 1944

Coded 'White B' this Me 262 A-2a belonging to KG 51 'Edelweiss' Geschwader was based at Rheine during September 1944. It carried the heavy scribble pattern of the two greens RLM 81 and 82 on the uppersurfaces with RLM 76 on the undersides. The unit code 9K+BH was painted on the fuselage sides, with '9K' and 'H' appearing in small black characters approximately one sixth in height of the individual white letter 'B'. Many of KG 51 Me 262s of this period had the tip of the nosecone, fin and rudder, as well as the gun ports edged in white denoting the Staffel colour. The W.Nr. 170096 was applied in black to the fin just below the Hakenkreuz. This machine was badly damaged at Giebelstadt on 2 October 1944 after completing 38 flights totalling 16 hours.

From bombers to fighters

Since September, most of the surviving bomber units had been at best inactive, at worst disbanding. On 23 November, after intense political infighting between Dietrich Peltz and his rival, *General der Jagdflieger* Adolf Galland, the order was given that the following units would convert to fighter operations, adding '(J)' for *Jagd* to their designations:

Stab/KG 6	I./KG 6	II./KG 6	III./KG 6
Stab/KG 27	I./KG 27	II./KG 27	III./KG 27
Stab/KG 30	I./KG 30	II./KG 30	
Stab/KG 55	I./KG 55	II./KG 55	III./KG 55

Additionally, a new III./KG(J) 30 was to be established, along with an *Ergänzungs-Kampfgruppe (J)* while most of the IV. *Gruppen* were disbanded — there was little need for new bomber crews and little fuel to spare for training. The IV./KG 51 however remained in being and during December it received what were termed 'five old Fw 190s.' The benefits to the *Luftwaffe's* front line were few. KG(J) 54 did see extensive action with the Me 262 but suffered very heavy losses. The other KG(J) units received limited numbers of piston-engined fighters for training in Czechoslovakia, some entering combat in the last days of the war with the few machines they had. The II./KG(J) 30's path would lead in a very different direction, however.

In December, III./KG 2 (withdrawn from operations the previous July) was also redesignated, becoming V./NJG 2, its Ju 88 Gs retaining their 'U5' *Geschwader* code. The unit became operational in April 1945, strafing Allied ground targets. Another loss to the bomber force was the *General der Kampfflieger, Oberst* Walter Marienfeld, killed by shrapnel on 23 October during the demonstration of a *Flak* weapon improvised by I./KG 54. His successor was *ObstIt.* Hans-Henning *Freiherr* von Breust.

As of 6 November, KG 200 gained a IV. *Gruppe*: The 13. *Staffel* was *Sonderverband Einhorn* renamed; the 14. and 16. were training formations; the 15./KG 200 was an experimental glider towing unit, formerly part of *Luftlandegeschwader* 1. The final element of this miscellany was *Versuchskommando* KG 200, the Hs 293 test unit at Garz-Usedom on the Baltic, formerly known as *Erprobungskdo. 36.*

Italy: June–December 1944

KG 35

Kampfgeschwader 35 is not well known. Its *Geschwaderstab* was recorded as 'newly established' in Parma on 6 June 1944. On both 28 July and 13 August an Fi 156 belonging to the unit was at Villaorba and the *Stab* was there by 7 September. Four days later, the *Geschwader* asked for a report on stocks of weapons and ammunition from its I. *Gruppe* at Bergamo-South as well as from *Gruppen* of the equally obscure JG 17 at Aviano and Maniago. This request, once it had been decoded, was the first the Allies had heard of either unit. An intelligence summary issued on the 15th concluded that: '...it is clear that the Fascist Air Force has now been reorganised, unreliable elements are being weeded out, and reliable elements regrouped in new units on the GAF [German Air Force] pattern (KG 35 and JG 17).' Probably the nearest KG 35 came to active service — albeit on the ground rather than in the air — was when three of its men returned wounded to Villaorba on 19 October, following an anti-partisan sweep. A week later, it was announced that both it and JG 17 were to be disbanded.

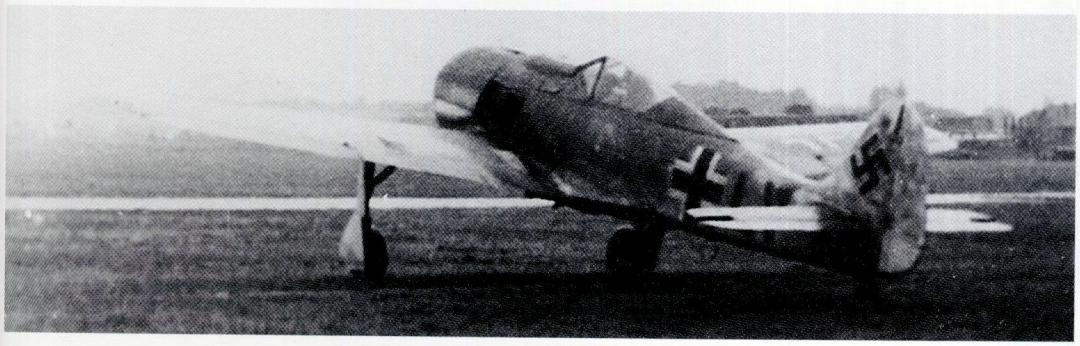
Sonderverband Einhorn

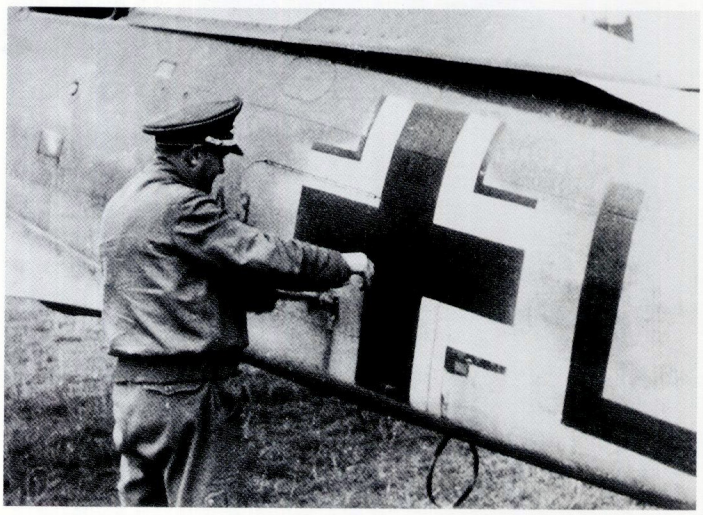
The last element of a *Kampfgeschwader* to drop bombs in Italy was KG 200's *Sonderverband Einhorn* which had arrived with a dozen Fw 190 F-8s in mid October 1944 and undergone blind- and night-flying training until, on 28 November, it put up five sorties against Forli under EGON guidance. At 17.00 on 2 December, '6 or 8 aircraft, either Fw's or Me's' dive-bombed and strafed Desert Air Force Advanced HQ and the road and bridge at Ronco but no damage was reported, just that the attack caused some excitement. At the same hour on 10 December, Cesena was attacked by Fw 190s with 1,000 kg bombs: one fell near an officers' mess, causing no damage; the other hit Eighth Army HQ's Signal Office, knocking out practically all line and radio communications. A postwar RAF study drily recorded that 'in view of an imminent Canadian attack this was highly inconvenient.' It was an hour before communications with the Army's three corps could be re-established and to quote the RAF again: 'There may have been an ingredient

of luck in the operation, but the event does illustrate however that the enemy intelligence was not always comatose. The size of that mission was contemptible but its results came close to being really disturbing.'

Six *Einhorn* aircraft started from Villafranca for Germany on 17 December but one was written off in an accident (a wrecked Fw 190 F-8/R1 of the *Sonderverband* was found on the airfield in May 1945). The five survivors joined NSG 20 at Bonn-Hangelar on 23 December and operated alongside that unit until *Einhorn* was absorbed into 11./KG 200 in late January 1945.

THIS PAGE: Four photographs of an Fw 190 F-8/R1 of KG 200's Sonderverband Einhorn, coded A3+LV, seen as it returns from a mission having disposed of a SC 1000 bomb. Members of the ground crew help the pilot out of the cockpit. Having exited the aircraft, the pilot is seen opening the fuselage hatch to the storage compartment.





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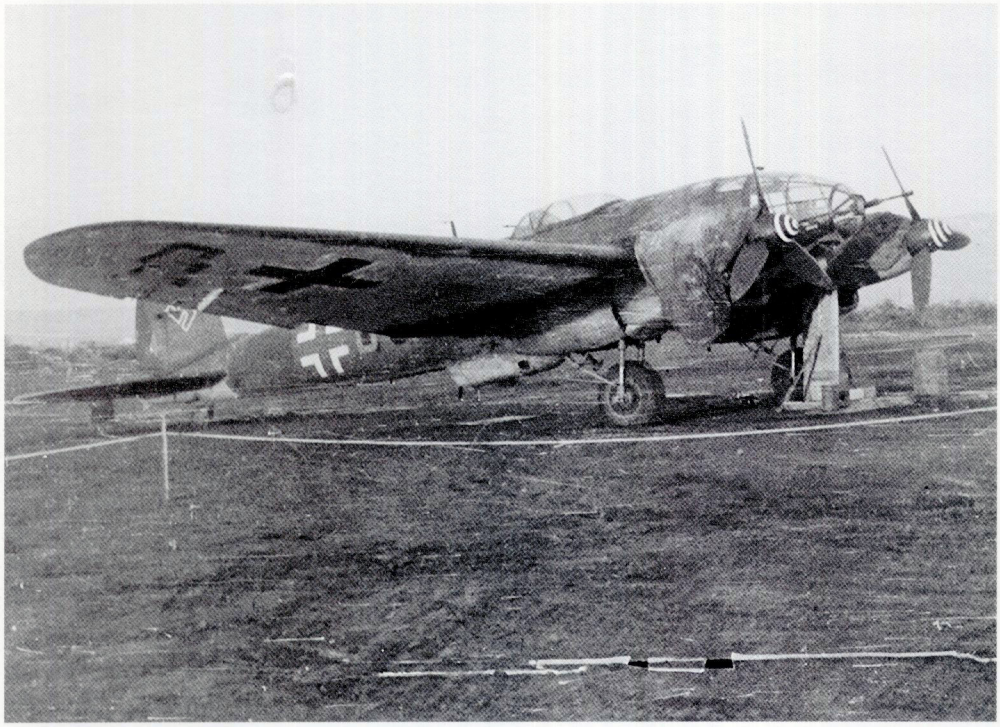
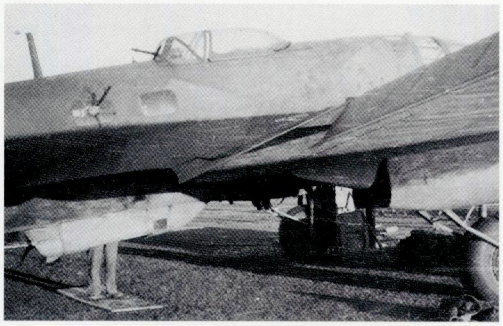
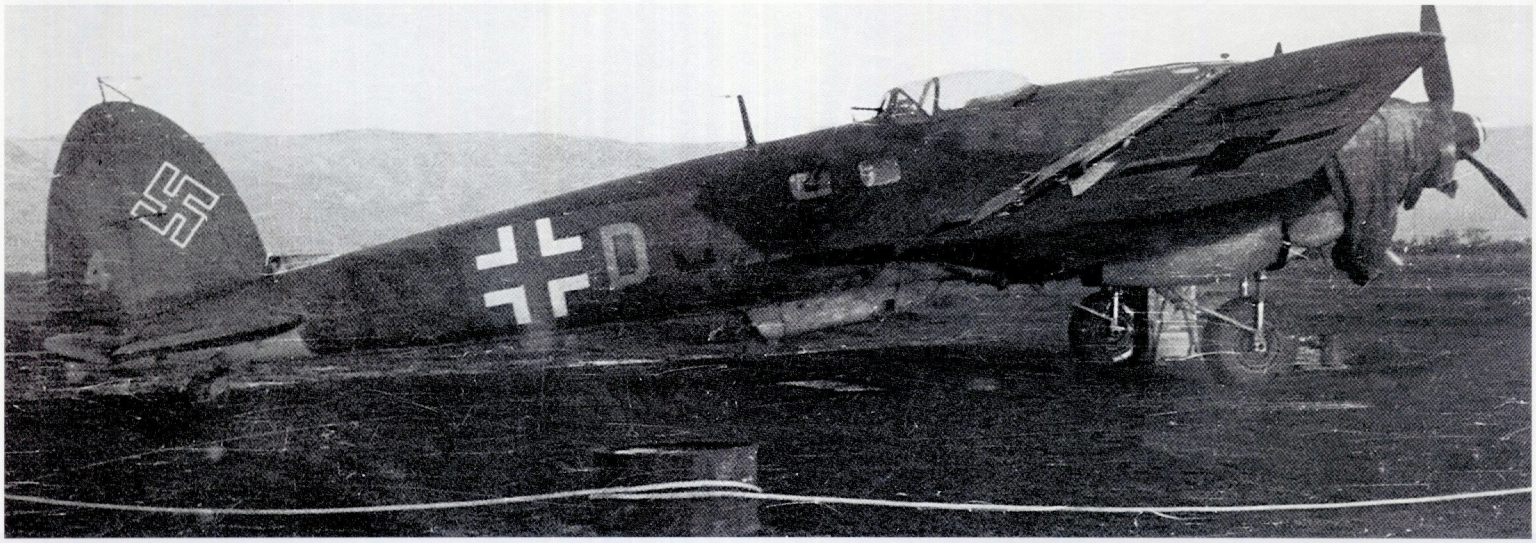
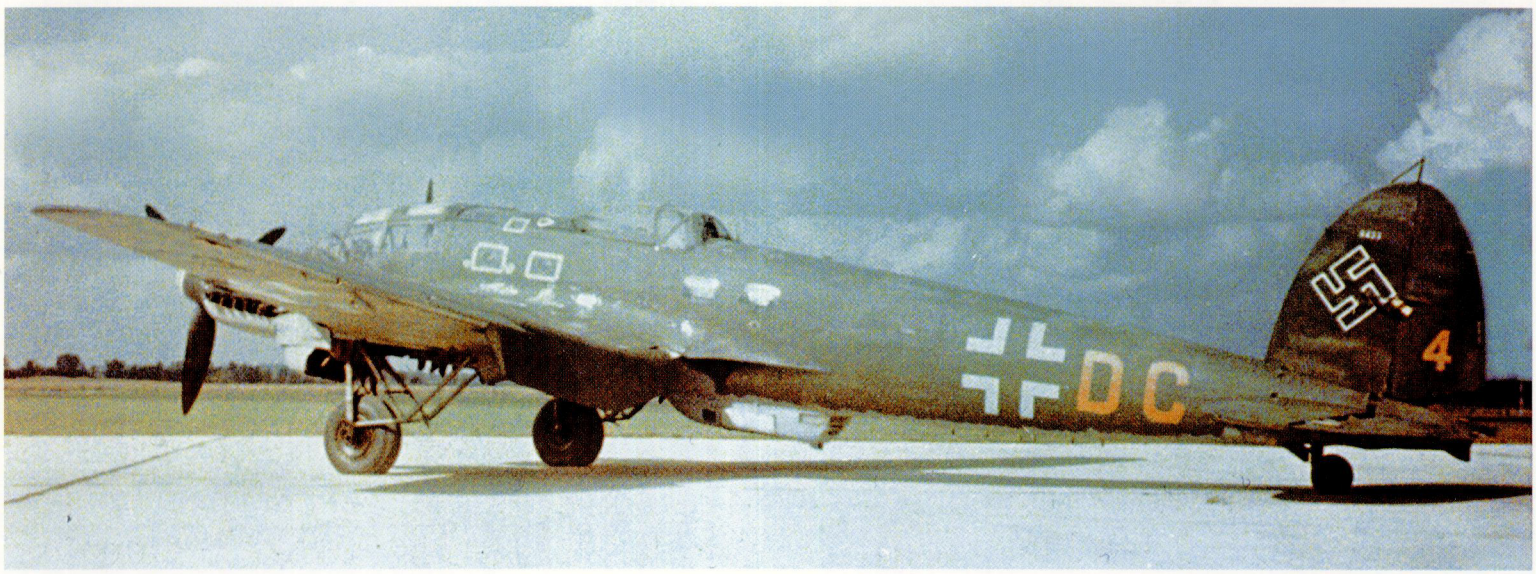
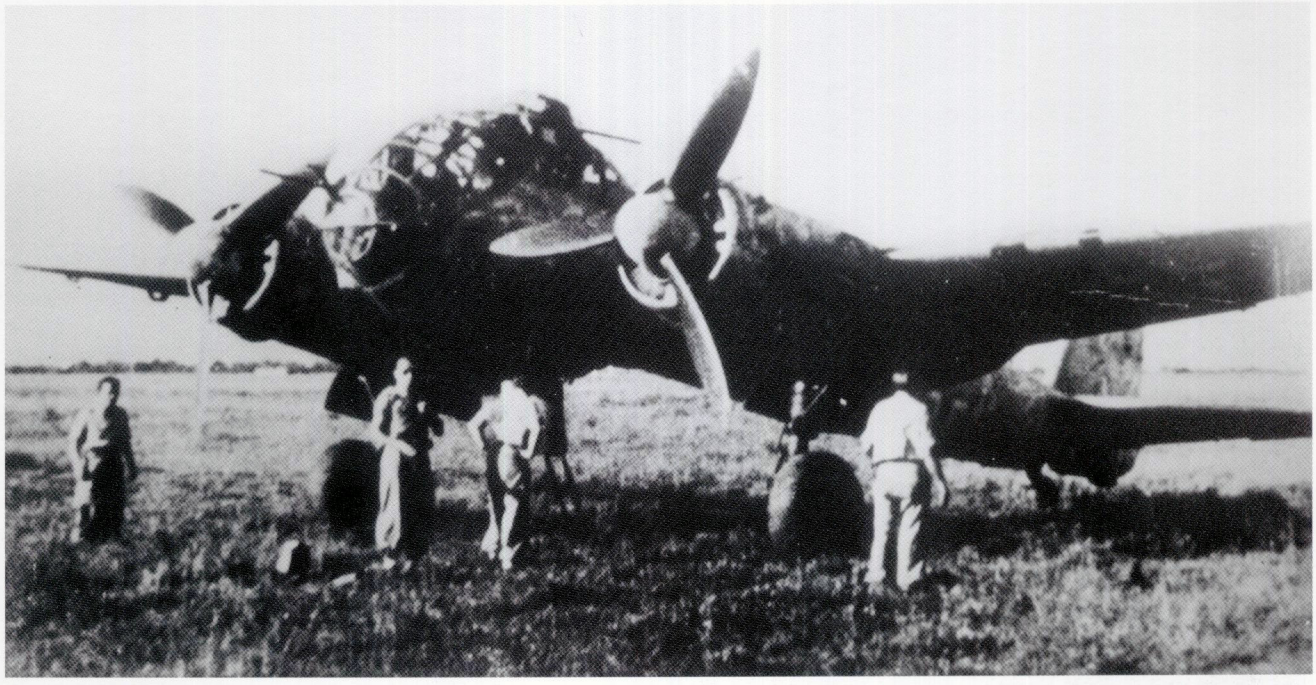


THIS PAGE: This He 111 H-16, W.Nr. 8433, 2B+DC, carries the markings of 2./Einsatzgruppe der 2. Fliegerschuldivision. It was later sold to Hungary and flown to Italy by a group of defectors on 9 December 1944 and was eventually taken to the USA as FE-1600. Camouflage is the standard 70/71/65 with what look like a patch of fresh paint under the white outline fuselage Balkenkreuz; the Hakenkreuz is also of the white outline type and the underwing cross appears to be all black. No Hungarian markings are carried and the spinners are black with a white spiral. The upper surface greens are carried well over the wing leading edges. The individual letter 'D' is in red and was repeated in black under the wing tips and there was a small red '4' on the rudder.









RIGHT: The Ju 188 of Lt. Josef Thurnhuber of 4./KG 200's Kommando Carmen, at Bergamo, Italy.

Watch on the Rhine

On 14 November, Göring had issued orders for *Wacht am Rhein* (Watch on the Rhine), a planned offensive through the Ardennes and on to Antwerp. The miscellany of units assigned to 3. *Fiegerdivision* for bombing missions demonstrates how far the fortunes of the *Kampfflieger* had declined:

Stab LG 1, I. & II./LG 1	Ju 88
I./KG 66	Ju 88 and Ju 188 illuminators
III./KG 66	Bf 109/Ju 88 *Mistel*
Einhorn Staffel	Fw 190 F-8
Stab KG 51, I. & II./KG 51	Me 262 A
Einsatzkommando KG 76	Ar 234 B
NSG 1	Ju 87 D
NSG 2	Ju 87 D
NSG 20	Fw 190 F and G
NJG 2 with four *Gruppen*	Ju 88 G

By the 19th, LG 1 had a strength of 30 Ju 88s, 15 of which had been flown to their new base at Fassberg. During the month, III./KG 66 became the new II./KG 200. The *Gruppe* consisted of *Staffeln* for the *Misteln* themselves, pathfinder/illuminators and replacement training. Despite equipment shortages, efforts were underway to rebuild pathfinder capability for the coming battle: on 1 December *Luftwaffenkommando. West* requested authorisation to equip and maintain 36 Ju 88 S aircraft of I./KG 66 to make full use of navigational procedures during target marking and flare dropping missions. Twelve aircraft were to be fitted with FuG 123 *Truhe 2;* 12 more with both FuG 17e *Y-Gerät* and FuGe 28; and another 12 with equipment for EGON control.

Meanwhile, forces estimated at 30–40 bombers continued to mine the Scheldt Estuary. On the night of 8/9 December, a convoy was attacked as well, in weather too bad for RAF night fighters to operate. After *Wacht am Rhein* opened on 16 December, the RAF noted that German bomber units 'attacked land targets in the battle area for the first time since September ... [they] bombed communications in forward areas and also laid mines and attacked shipping in the River Scheldt.' In the early hours of the 18th, a Ju 88 A-4/*trop.* of 1./LG 1 crashed near Nederweert, Holland, killing its four crew. On the fin was the *Werk Nummer* 550061 and on the fuselage the code L1+EH (the E in white and the remaining letters in black); camouflage was described as 'upper and side surfaces dark green, under surfaces light blue.' By contrast, the disintegrated remains of a Ju 88 S-3, W.Nr. 330934, shot down on the 23rd, and coded +CP (suggesting it belonged to 6./LG 1) had a grey-green mottle on its upper surfaces and black undersides.

Summer 1943-May 1945

ABOVE: Hauptmann Diether Lukesch led the first bomber operations with the Ar 234 B. Born near Vienna on 15 July 1918 he flew throughout the war mainly with KG 76. He received the Ritterkreuz on 20 December 1941 for night operations against the British Isles and the Eichenlaube on 10 October 1944 for his action on the Mediterranean front. After leading a series of Ar 234 bombing attacks he took over III./EKG 1, the jet bomber training Gruppe. In the background of this photograph in the hangar can be seen an Ar 234 B on the right, and an Me 262, also used for training.

The I./KG 51 filed this report at noon on 18 December:

'20 Me 262 sorties: 18 up between 07.44 and 08.18 hrs., down between 08.24 and 09.07 hrs.; two aircraft up at 11.10 and down at 11.36 hrs. Task: to tie down Allied fighters in battle area and harass march movements. No Allied aircraft encountered. Targets included vehicles in locality north of Hasselt and Neerpelt railway station. Two broke off owing defects, another force landed. Two on weather recce broke off owing weather. Definite reinforcement of light AA in localities was established. No losses. Considered that there were very few worthwhile targets. Gruppe enquired what value railway stations had as alternative targets.'

Three days later, II. *Jagdkorps* finally cancelled the altitude restriction on the Me 262s, giving the go-ahead for low level operations and some prospect of effectiveness. On the 22nd, the conventional bomber force in the West consisted of 41 serviceable aircraft:

Unit	Aircraft	Crews
Stab LG 1	1 (1)	?
I./LG 1	20 (18)	30 (25)
II./LG 1	18 (13)	35 (23)
I./KG 66	? (9) Ju 88 S-3 (+ 1 'becoming serviceable' at 11.00 hrs.)	

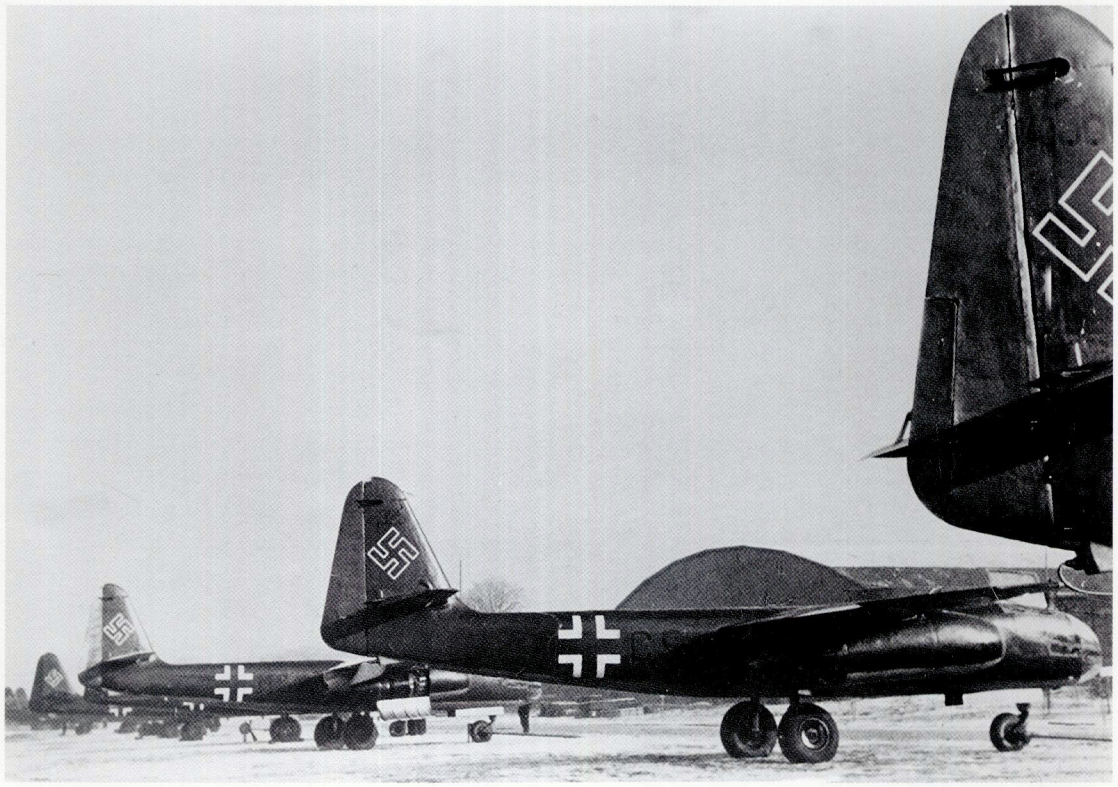
Christmas Eve saw the first Ar 234 bombing mission, when nine aircraft of III./KG 76 attacked Liège and Namur, dropping nine SC 500 bombs on railway installations. The American troops besieged in Bastogne were denying a crucial road junction to the stalled German armies and that night an attempt was made to bomb them out. The *Luftwaffe's* plans were read by Allied codebreakers the morning after the raid:

'I./KG 66 at 13 hrs/24th reported four aircraft ready for first half; for second half, not known. Secondly, Jagdkorps II orders 15.30 hrs/24th supplementing orders for night 24/25th ... (a) aircraft mining operations for LG 1 cancelled; (b) LG 1 with subordinated I./KG 66 and Gefechtsverband Hallensleben concentrated attack with HE on Allies compressed in Bastogne at 18.30 hrs. Target marking first by Gefechtsverband Hallensleben, repeated by KG 66 until 18.45 hrs. (Comment: above not wanted by Army at 17 hrs.).'

BELOW: A Kettenkrad tows Diether Lukesch's Ar 234 B-2, F1+BT along the runway at Münster-Handorf in December 1944. Lukesch can be seen standing in the cockpit. He led the Einsatzstaffel of KG 76 between 17 December 1944 and 26 January 1945.

Wanted or not, a small force of Ju 88s devastated the town centre and two Ju 88 S-3s of I./LG 1 fell to fighters. On Christmas Day, II./LG 1's strength was down to 12 aircraft and the *Geschwader* reported that another 13 Ju 88 A-4s had arrived but they had no flame dampers so were useless for operations. The following morning, I./KG 66 reported having 14 Ju 88 S-3s. The raiders, I./LG 1 among them, returned to Bastogne in greater force on the 30th but the Americans stood fast.

ABOVE AND RIGHT: A line-up of Ar 234 B-2s of III./KG 76 are lined up on a thin layer of snow at Burg near Magdeburg in December 1944. Amongst the aircraft are F1+MS of 8./KG 76 W.Nr. 140325 and F1+ER of 7./KG 76.



Summer 1943-May 1945

The Western Front

January–February 1945

ABOVE:
A Ju 88 A-5 is refuelled for another night mission. All the unit codes, national markings and the whole of the fuselage sides and undersurfaces have been overpainted in black.

Operation Siskin

Along with naval special forces and V-weapons, I. and II./LG 1 had played their part in the *Wehrmacht's* efforts to deny the full capacity of the port of Antwerp to the Allies. On the night of 22nd/23 January, the two *Gruppen* had attacked a convoy off Zeebrugge and were engaged by Ostend's AA from 19.08 hrs. The gunners claimed three destroyed (the same number LG 1 reported missing) before the Ju 88s retired east over Walcheren and Breda. At 09.10 hrs next morning, *Fw.* Horst Schimansky's Ju 88 A-4 was sighted at 2,500 m near Ostend and destroyed by heavy AA, an unexploded mine being found amidst its scattered wreckage.

At 13.30 hrs., II. *Jagdkorps* had ordered that if the weather was suitable, LG 1, with I./KG 66 subordinated, was to lay mines in the Scheldt Estuary during the first half of the night under the codename *Unternehmen Ziesig* (Operation Siskin). The Allies reckoned 15–20 aircraft were active between 18.36 and 19.20 hrs. and six were claimed destroyed by the hundreds of anti-aircraft guns deployed in the area to counter the V-1s. A Mosquito of 409 Squadron RCAF also shot a Ju 88 into the sea. The II./LG 1 had a crew killed in a take-off accident at Gardelegen while the Ju 88s of *Hptm.* Paul Hecking, *Kommandeur* of II. *Gruppe* and *Oblt.* Hermann Huber, a *Staffelführer* were missing in action. This was to be the *Lehrgeschwader's* last effort against the river traffic and over the next five days, Allied naval forces cleared 36 mines.

The I./KG 66 had contributed eight pathfinders to the operation, leaving their base at Dedelstorf from 17.00 hrs. onward to lay *Lux* buoys and ground markers near Vlissingen. They also carried SD 50 fragmentation bombs to use against airfields, AA batteries and targets of opportunity. *Leutnant* Peter Schulz arrived early and circled to use up time but AA fire drove his Ju 88 S-3 off course. On the next run-in, his *Lux* buoy hung up and he tried a third approach, hoping to release it manually but shrapnel peppered the bomber, severing its rudder controls. Schulz, still under fire, made for German lines but a fire in one engine forced him and his two crewmen to bale out into captivity near Aalst. Next day, backing up the mining effort, four Ar 234s of III./KG 76 attacked shipping in Antwerp harbour, some 22 fighters covering their take-off and landing.

Remnants

Training support for the conventional bomber force was being reorganised and on 30 January IV./LG 1 was renamed I./*Ergänzungskampfgeschwader* 1. On 13 February it was reported that no

fewer than 63 He 177s were at Lüneburg, although whether these were held in the hope of some day reactivating the heavy bomber force or for scrap is not clear. Certainly none of these aircraft was with the type's former operator, I./KG 40 which on 20 January reported its strength as a single Klemm Kl 35. An intercepted message of 14 December had suggested that II./KG 40 might be re-equipping with the Ar 234 but on the 31st it signalled that it had none of the type and it seems that elements of both KG 40 and KG 100 spent some months in limbo, neither active nor disbanded.

LEFT: Another Me 262 A-2a of 1./KG 51, coded 9K+YH. This machine has two notable features. The first is that it carries two of the old ETC 503 type bomb racks, although they have a small timber fairing scribing them to the underside of the nose. The other is that the gun cowling of the upper MK 108 cannon has had its gun ports blocked off, which was often done using some timber doweling and smoothing it into shape. On this occasion remaining two MK 108 gun ports have not been outlined in white.

Blitzbomber

Although their participation in *Unternehmen Bodenplatte*, the New Year's Day airfield attacks, had had little impact, by early 1945, the Me 262 bomber units were at close to full strength. On the evening of 8 January for example, I./KG 51 had 32 (20) aircraft and 29 (27) pilots but only three days later the *Geschwader* was ordered to give up four Me 262s to *Kommando Major Stamp* at Rechlin-Lärz for air-to-air bombing trials. A month later, this detachment would be redesignated as the *Stabsstaffel* of JG 7 and use its bomb racks to carry WGr. 21 rocket launchers.

If the jet bomber force can be said to have had a heyday, it was probably during the Rhineland battles of February and March 1945. It is telling that what was envisaged as a revolutionary, war-winning weapon probably dropped most of its bombs on captured German towns and villages. On 8 February however, eight Ar 234s operated against Belgium's rail network and 20 Me 262s attacked troop movements between Colmar and Mulhouse. The Arados were something of a drain on *Luftwaffe* resources, requiring 24 Bf 109s to cover their airfield and fend off RAF Tempests. By the 14th, there were 35 Ar 234s at Achmer and their target area had shifted north to centre on Kleve. That day saw 21 sorties by KG 51 and 34 by KG 76, divided between a morning assault (for which no fewer than 86 fighters provided airfield cover) and a smaller afternoon one. A week later, 41 Arados were sent against Allied troop concentrations in the same area, joined by 18 Messerschmitts of I./KG 51 while in the late afternoon, eight aircraft of II./KG 51 attacked Nijmegen, losing one. Again, the airfield cover was extensive: some 80 machines. Meanwhile, 5. and 6./KG 51 were exchanging signals disputing the rightful allocation of *Kettenkrad* tractors to tow their jets to and from their dispersals.

On the 22nd, III./KG 76's Arados operated throughout the day against troop concentrations at Lammersdorf and between Jülich and Düren while as many as 30 of KG 51's jets went to Aldenhoven and Geilenkirchen, each *Geschwader* losing a machine. The lost Ar 234 (W.Nr. 140173, F1+MT) was shot down by Lt. David B. Fox of the US 366th FG and belly-landed with 20% damage at Selgersdorf on the banks of the River Roer. *Hauptmann* Josef Regler, *Kapitän* of 9./KG 76 was unhurt but before his machine could be recovered, the area was overrun by American troops and the *Blitz* was taken to England for detailed examination, achieving fame as the first of its kind to fall into Allied hands. Covering sorties for the day rose to 109, an indication of the importance attached to safeguarding the last remaining day bombers in the West.

The 25th of February was another big day, with 30 Me 262s and 20 Ar 234s making 'continuous attacks' in the Linnich, Düren and Jülich areas, backed up by sweeps involving 125 fighters from 07.35–09.50 hrs. and another 96 airfield protection sorties. Even so, *Luftwaffenkommando West* reported the loss of three jet bombers.

Scandinavia and the Arctic

The Murmansk run

RIGHT: Like other bomber aircraft the Fw 200 was also pressed into use as a transport aircraft. In this instance a Fw 200 C-3, coded F8+HK from 2./KG 40 is being used to carry troops to re-enforce units on the Eastern Front.

Rebuilt in Germany after their mauling in France, I. and II./KG 26 transferred to Norway during autumn 1944, because the High Command still feared an invasion attempt there, and to renew the air effort against Allied convoys sailing to and from the north Russian ports. They were joined by the III. *Gruppe* which since August had been converting to the Ju 188 A-3. Despite the contrast between operating conditions over the Mediterranean and the Arctic Ocean, fuel shortages limited the orientation and acclimatisation programme that could be carried out and operations were frequently limited to a single *Gruppe*.

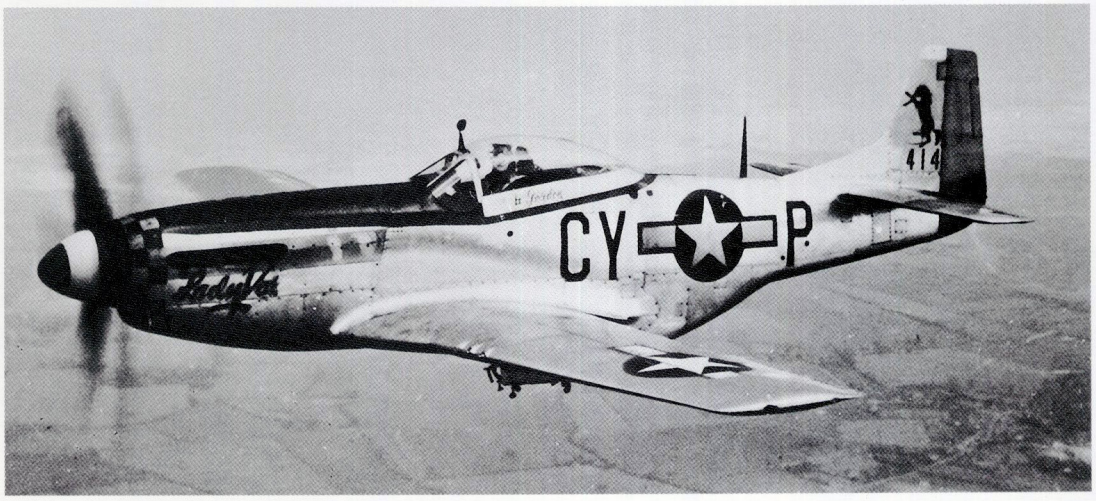
The Fw 200s of III./KG 40 also found a new home in Norway after losing their bases in Western France. This was superficially logical since much of the U-boat force they supported had also relocated to Norwegian ports; the drawback was that Allied escort carriers and their embarked fighters were highly active in northern waters. Eventually, the Fw 200s were formed into *Transportstaffel Condor*, retaining the F8 unit code of KG 40 but carrying out tasks such as the evacuation of personnel from Finland after that nation concluded a separate peace with the USSR in September 1944. One machine crashed into a fjord on 11 October while carrying *Luftwaffe* female auxiliaries south from Banak, with the loss of all 44 passengers and five crew. A reorganisation plan of 19 February 1945 called for the *Transportstaffel's* disbandment, with its aircraft divided between other Norwegian-based units.

In October, November and January not one convoy lost a ship to aircraft or submarine attack — some were not even detected. On 12 December, a reported nine aircraft attacked convoy RA 62, scoring no success but losing two of their number, according to the Allies. In early February, KG 26 flew a major operation against JW 64, the *Stabsstaffel* and II. *Gruppe* losing no fewer than seven Ju 88s (two A-4s on the 6th; another A-4 and four A-17s next day) while their reconnaissance support, 1.(F)/120, lost three Ju 88 D-1s. Further sorties against the same convoy on the 10th ended in failure and on the 20th, II./KG 26 lost two more Ju 88 A-17s in an equally fruitless sally against RA 64. The *Geschwader*'s last success came on 23 February when it sank the *SS Henry Bacon*, heading back to Russia in ballast after becoming separated in a gale. Warned by the convoy escort of incoming aircraft, the Liberty Ship defended herself fiercely before succumbing to a torpedo hit. When the *Luftwaffe* raid commander radioed this success to Bardufoss, the signal was intercepted by the escort carrier *Campania* and the position of the sinking ship established by direction-finding. Although Captain Alfred Carini was lost along with 14 of his crew, the rest of those on board were rescued by the Royal Navy.

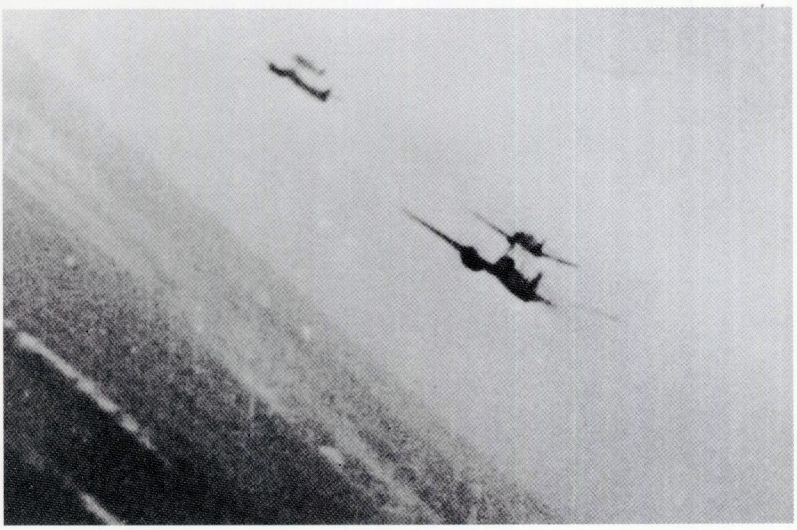
Operation Dragon's Cave

KG 200 was now led by *Obstlt.* Werner Baumbach, celebrated for his anti-shipping successes with KG 30 and an early supporter of the *Mistel* concept. In January 1945, plans were in train to use the composites in a mission from Tirstrup, Denmark against the Royal Navy's anchorage at Scapa Flow in the Orkney Islands. This was *Unternehmen Drachenhöhle* (Operation Dragon's Cave) which sought to strike a blow against Britain's morale by sinking battleships and carriers en masse. What material benefit this could have afforded Germany at this stage of the war the war is unclear but with difficulty, the necessary fuel was amassed. The *Misteln* were to have reconnaissance and pathfinder support and KG 200's newest *Gruppe* would also take part. The III./KG 200 was formed in January 1945 by redesignating I./SG 5, latterly in action over Finland. Its Fw 190 F-8s were intended to carry the *Bombentorpedo*, an anti-ship gravity bomb shaped to maintain its trajectory on entering the water and economical to build. The Focke-Wulfs were to fly from Stavanger-Sola in Norway, though how they could have got back is questionable since the flight would be about 500 km each way, far beyond the Fw 190 F-8's quoted 150 km radius of action with a centreline bomb. After several composites had been shot down in transit to Tirstrup or strafed in their dispersals, the plan was finally dropped in February. Instead, the 11./KG 200 transferred to Germany in the night ground attack role. The 9. and 10. *Staffeln* joined it at the end of March, one of them apprently operating by day. In official documents, III./KG 200 carried the suffix '(BT)' to the last but the *Bombentorpedo* never saw action.

ABOVE: Fw. Willi Döring of 6./KG 200, is not best pleased at having his photograph taken. He is seen here tapping his forefinger to his temple, at Burg, early 1945. Many pilots were superstitious and considered it a bad omen to be photographed prior to a mission. The pilot behind Döring, partially obscured, is Fw. Emil Degering. Both pilots had flown the Mistel with KG 101 in France. The Fw 190 on the first combination has its engine running and a drop tank fitted and the Ju 88s have been fitted with a hollow charge warhead.



LEFT: A P-51 Mustang of the 343rd Fighter Squadron, 55th Fighter Group which encountered the Mistel of II./KG 200 over Hagenow on 3 February 1945.

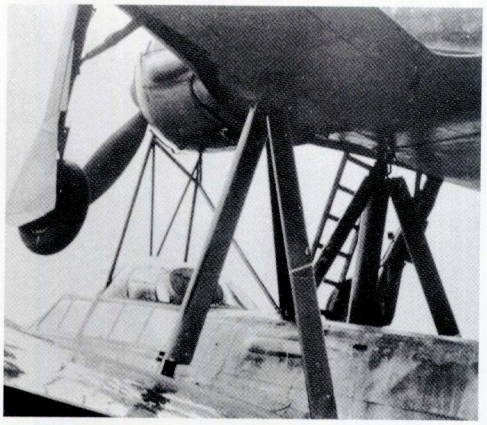


RIGHT: Fw. Fritz Lorbach of 6./KG 200 was one of three pilots detailed to ferry Mistel from Kolberg to Tirstrup on 3 February 1945 and was bounced by P-51 Mustangs of the USAAF 55th Fighter Group.

LEFT: Two Mistel of II./KG 200 caught on gun camera film east of Hagenow by Lt. Bernard H. Howes of the US 55th Fighter Group on 3 February 1945.

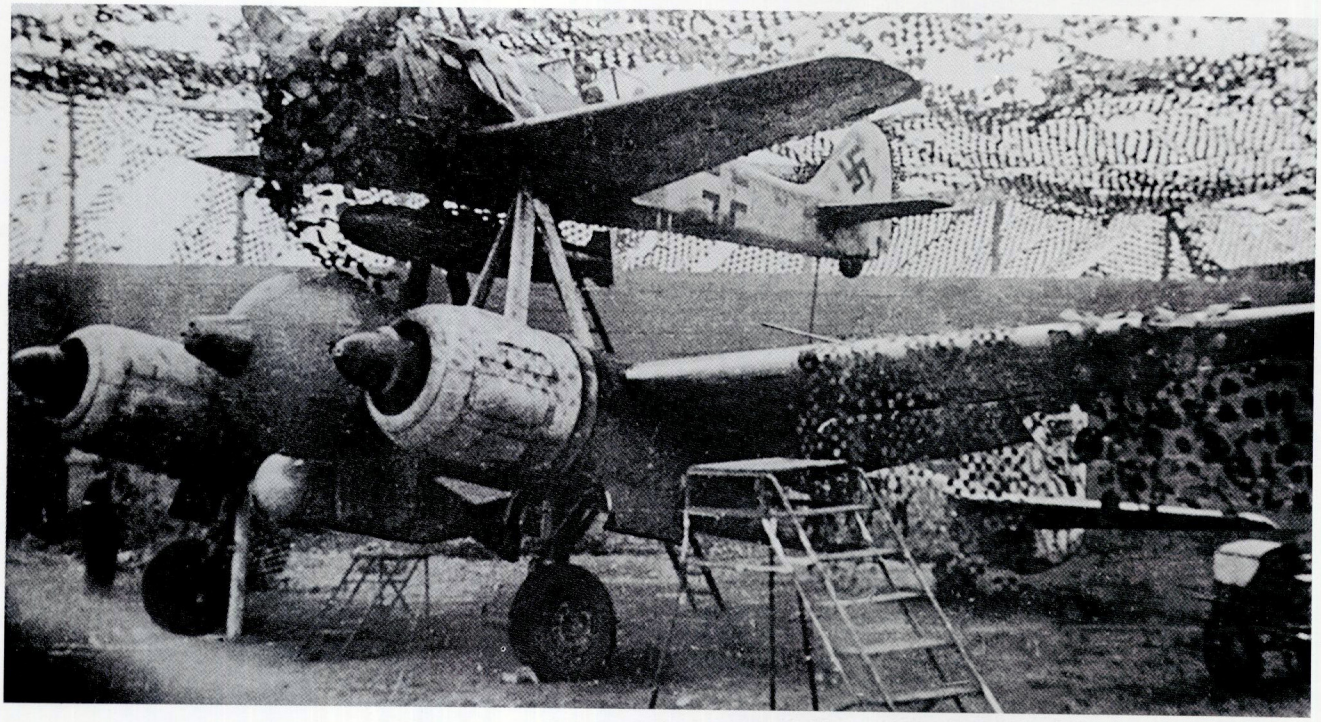
Summer 1943-May 1945

BELOW: Close-up of the main fuselage connection strut details for attaching the Fw 190 to the lower Ju 88.

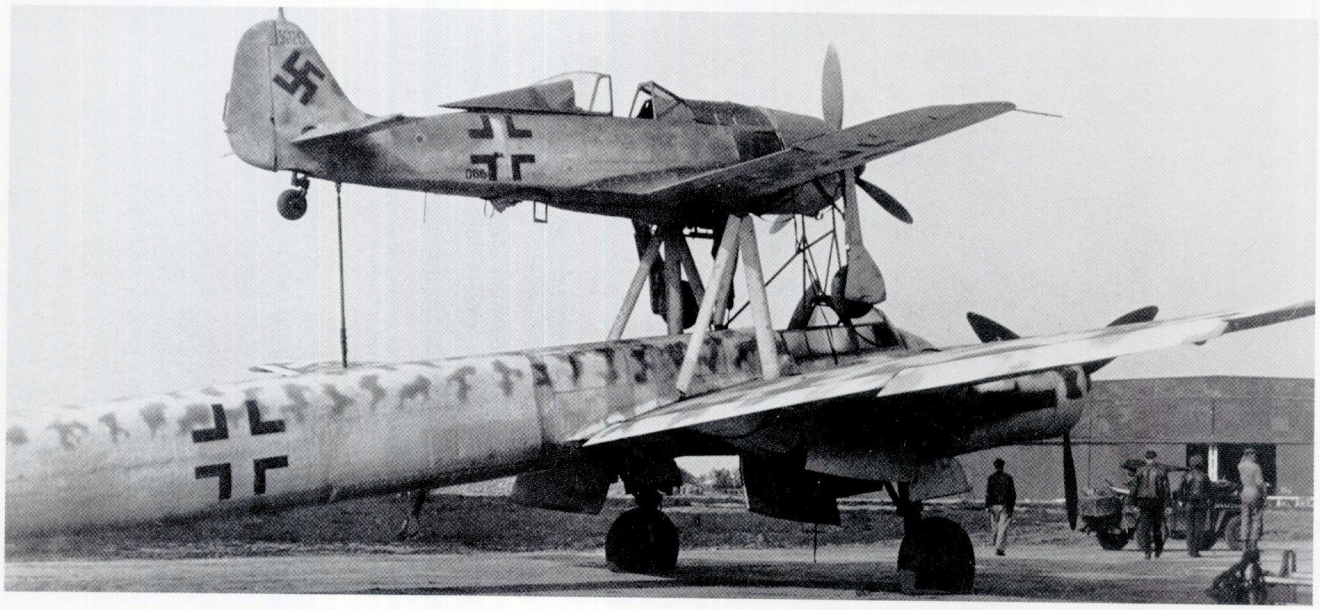


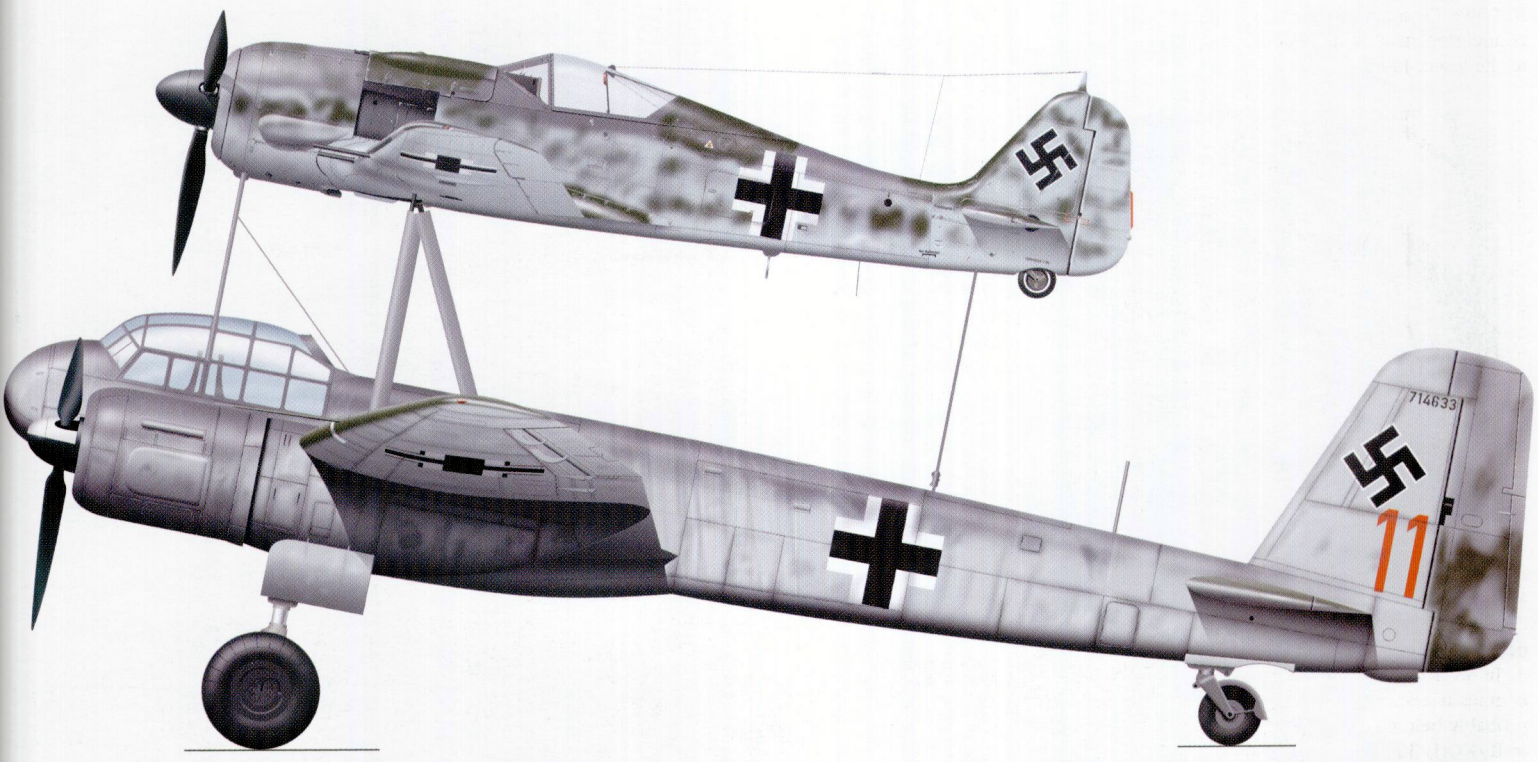
RIGHT: Three pilots of 6./KG 200 wait by one of their Mistel 2s at Burg prior to the abortive mission to Antwerp in early 1945. From left: Fw. Rudi Riedl (without lifejacket), Fw. Willi Döring and Fw. Emil Degering. Note the Ju 88 has been fitted with the hollow charge warhead, with the ladder lying on the wing ready to allow the pilot access to the Fw 190 upper component. The Fw 190 has been fitted with a drop tank and the wearing of a lifejacket would indicate a long-range mission.

RIGHT: This Mistel 2 still under camouflage netting is having its Ju 88 G-1 engines tested, probably belonged to II./KG(J) 30 operating from Oranienburg in March 1945. An interesting feature is that the Ju 88 G-1 has been fitted a SHL 3500 'short' fuse (Sprengkopf ohne Elefantenrüssel) and carries a 900 ltr fuselage mounted drop tank, whilst the Fw 190 F-8 is fitted with a 600 ltr streamlined drop tank.



RIGHT: As the war drew to a close the Allies found many abandoned Luftwaffe aircraft throughout their captured territory. Shown here is what appears to be a brand new example of a Mistel S3C captured at Bernberg in April 1945. This combination consisted of an Fw 190 A-8, W.Nr. 99612433/ Ju 88 G-10, W.Nr. 460066.

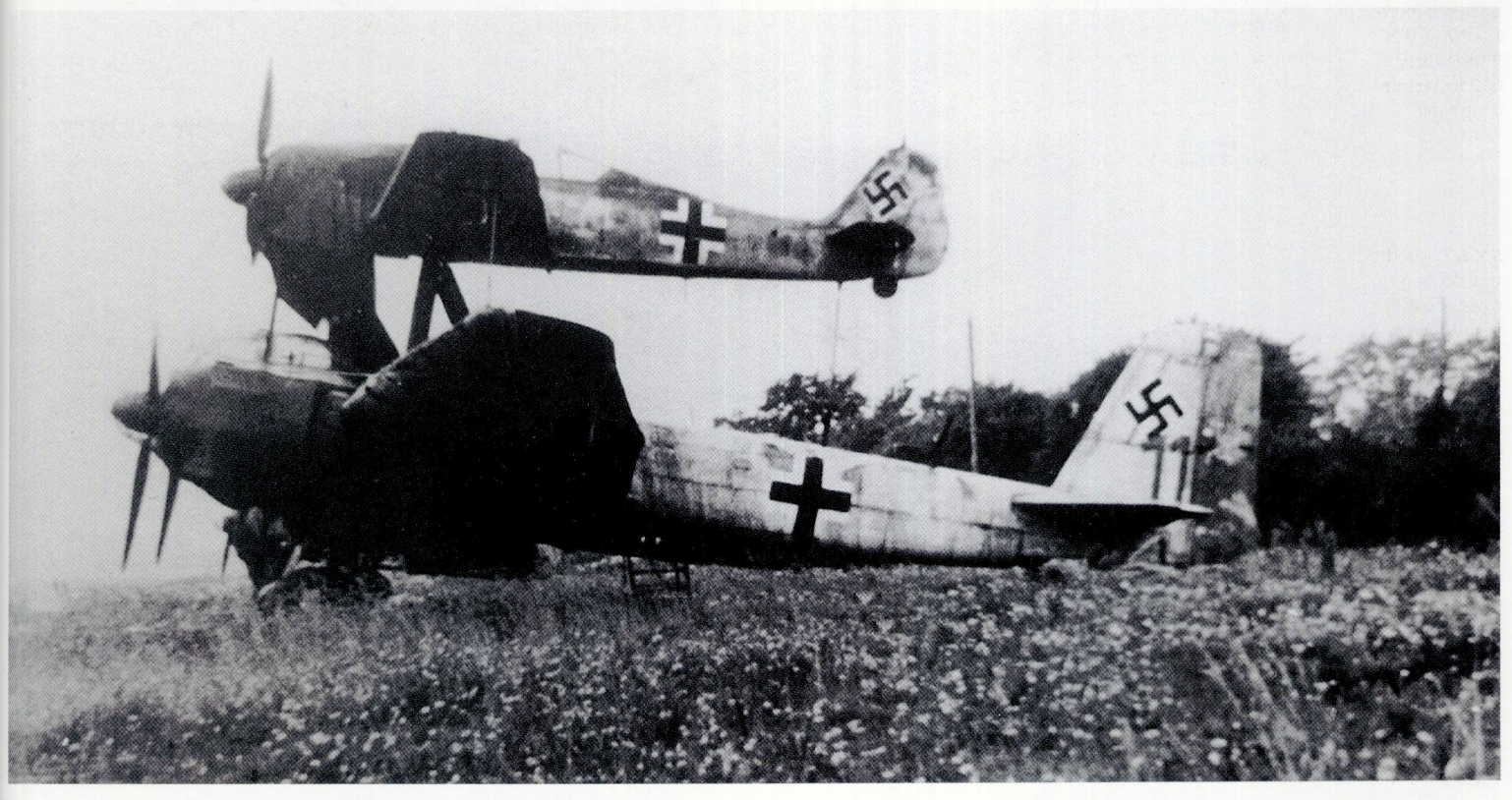




Mistel S2 combination formed from an Fw 190/Ju 88 G-1, W.Nr. 714633, 'Red 11' of 6./KG 200, Tirstrup, Denmark, February 1945

Most Mistel aircraft appear to be badly worn aircraft with the camouflage being varied and non standard. This example shows the Fw 190 A-8 in standard factory finish of greys and patches of green on the upper surfaces with additional patches of green mottle applied to the sides of the fuselage but no unit markings were applied. The Ju 88 G-1 appears to have had its rudder replaced by one from another aircraft with the whole machine having uppersurfaces of greys with 76 underneath. The Werknummer is painted in black on the upper part of the fin and the individual aircraft number has been painted in red below the Hakenkreuz.

The Mistel S2 was a combination comprising an Fw 190 A or F upper component and a Ju 88 G-1. This photograph shows the training combination with the lower composite Ju 88 G-1, W.Nr. 714633, 'Red 11' of 6./KG 200 seen close to the woodland dispersal at the edge of Tirstrup airfield in Denmark in spring 1945.



Mistel 2 Fw 190 A-8/Ju 88 G-1, W.Nr. 714050, 'Red 12', flown by Rudi Riedl, 6./KG 200, Tirstrup, February 1945
This Mistel shows an operational version with the Ju 88 G-1 having been fitted with an 'Elephant's Trunk' SHL hollow-charge warhead to the front of the fuselage bulkhead. The machines are similarly camouflaged to the profile shown on page 367. In this instance the individual aircraft number '12' has been painted on the rudder. The conversion number '618' and 'RW9' indicating that this aircraft had been to the Junkers 'Reperaturwerkstatt' in Nordhausen, was also applied in red on the rudder.

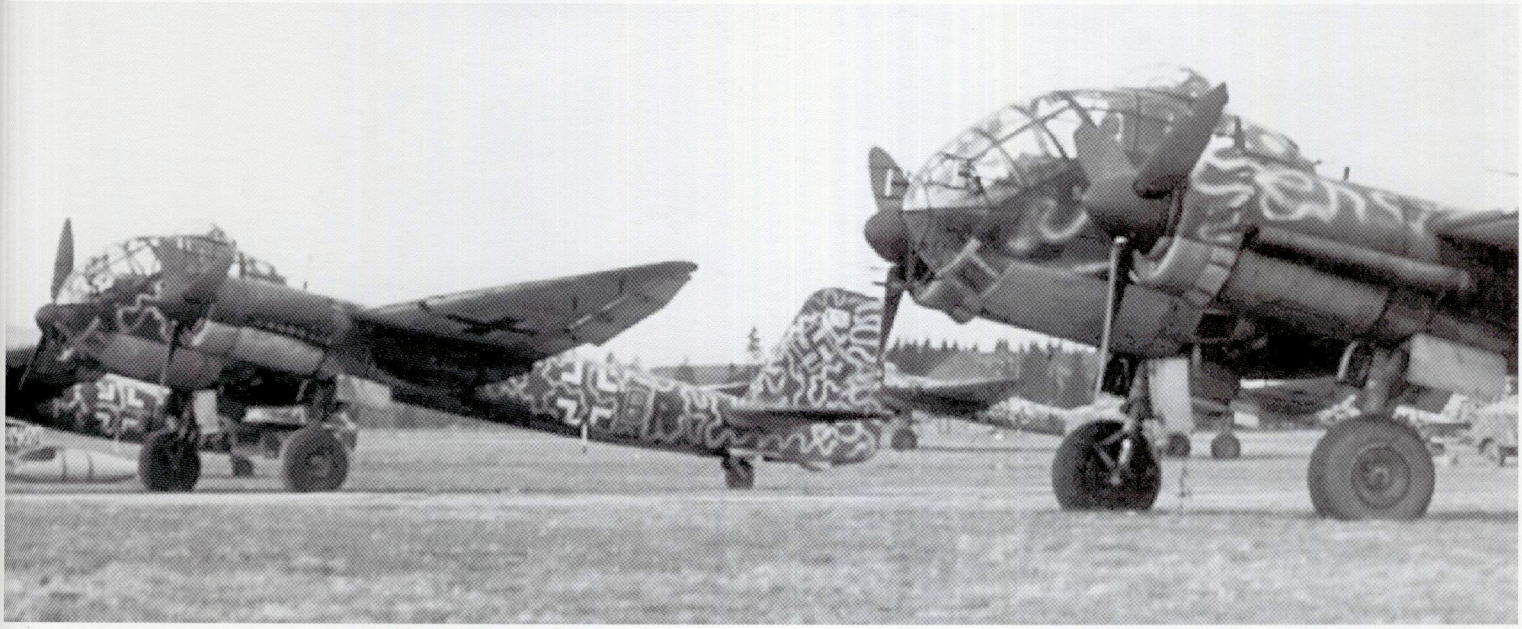
This photograph of an operational Mistel 2, 'Red 12', assigned to Fw. Rudi Riedl was taken in early 1945 at Tirstrup, Denmark. The Ju 88 G-1, W.Nr. 714050 has had the front cockpit section replaced with a hollow charge warhead, suggesting imminent operational use. Some primitive attempt has been made to camouflage the aircraft by parking them near some trees and using branches and tarpaulins to hide them from Allied reconnaissance. The 'RW' number 618 also painted in red on the rudder of the Ju 88 was the Reperaturwerkstatt (works conversion) number applied by the Junkers works at Nordhausen.

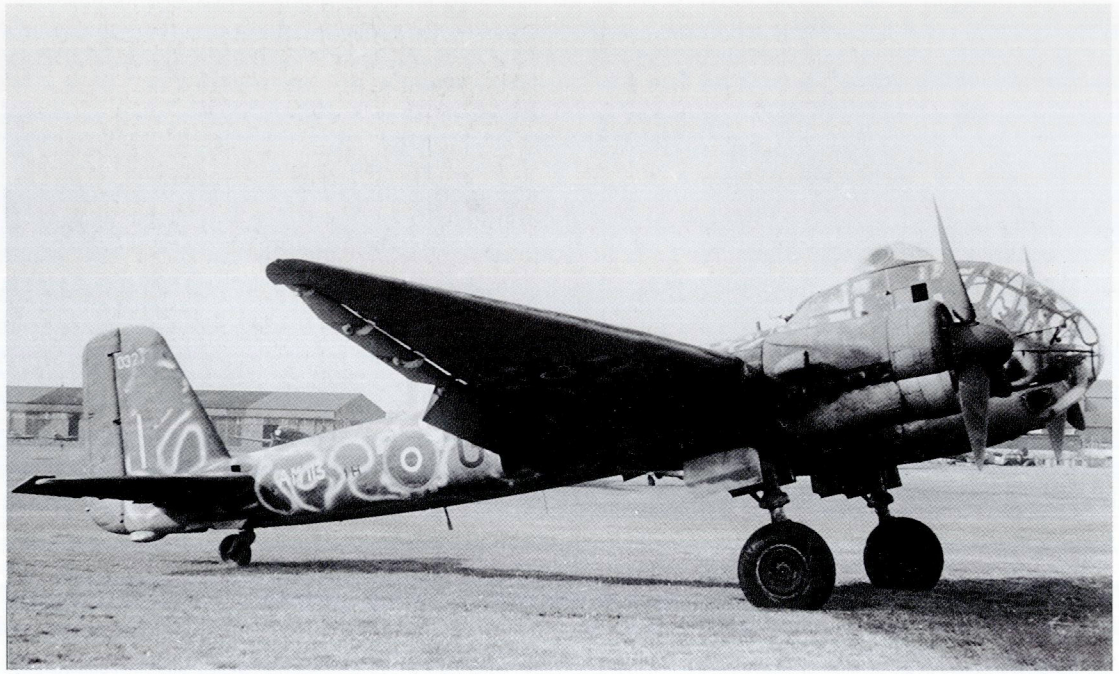
Last missions

By March, I./KG 26 had been withdrawn from operations to be converted to the torpedo-carrying Fw 190 but this was suspended by OKL on 28 April, the *Gruppe* disbanded and its crews were ordered to be split up among the remaining *Gruppen* if sufficient Ju 88s were available. After weeks of inactivity, 16 Ju 88s and 29 Ju 188s took of on 30 March to attack a convoy north east of the Faroes: they failed to find it but lost four aircraft, two of the crews being rescued by a Do 24. On the evening of 21 April, 42 Mosquitoes of the RAF's Banff Strike Wing were returning from a patrol to the Kattegat when they ran into 18 Ju 88s and Ju 188s of II. and III./KG 26 on an armed reconnaissance to the coast of Scotland, claiming nine shot down in the ensuing, unequal action. German sources suggest that only six Ju 88s were in fact lost but that four others were damaged. Two Mosquitoes were claimed although none was lost.

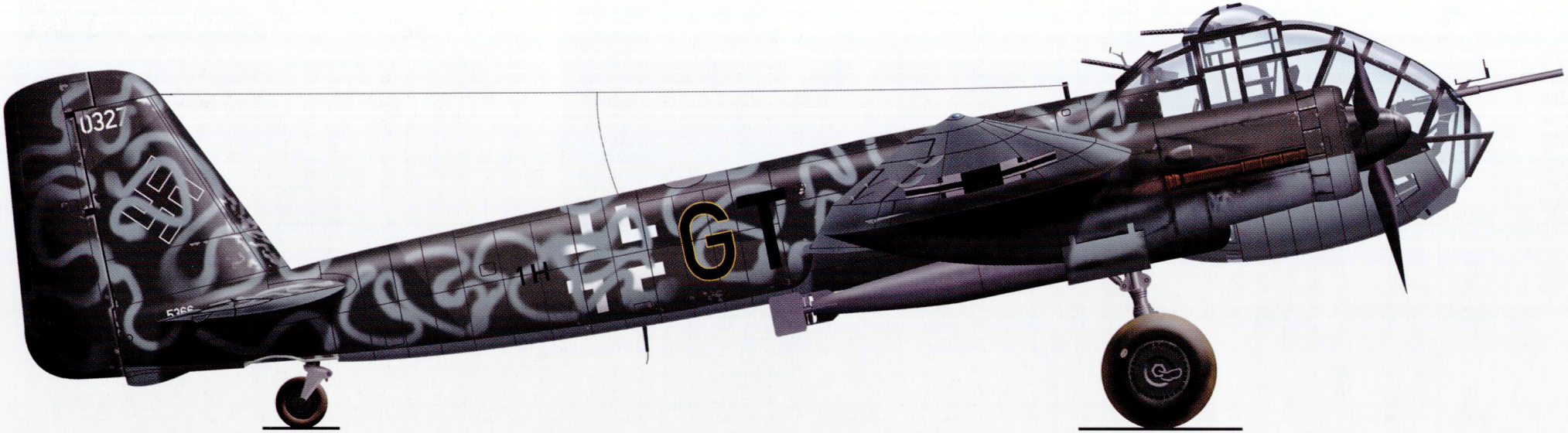
On 1 May, KG 26's aircraft were lined up on the runway at Bardufoss ready for take-off when their operation against a convoy off Bear Island was cancelled. The *Geschwader's* final mission would instead be the evacuation of wounded soldiers from the Kurland pocket on 7 and 8 May, some aircraft landing at Lübeck-Blankensee which was already in British hands. They were joined in this assignment by the surviving Fw 200s, one of which, F8+MS, sought refuge in neutral Sweden.

THIS PAGE: At the end of the war many Ju 88 and Ju 188 torpedo aircraft of KG 26 were captured by the British in northern Norway. These machines captured at Gardemoen belonged to III./KG 26 and were later blown up and destroyed.





This Ju 188 A-2 belonging to 9./KG 26, coded 1H+GT, was captured by the RAF at the end of the war at Lübeck. It was proposed that the machine be used at the Royal Navy Fleet Air Arm station at Gosport for torpedo-dropping trials, but this did not take place and the aircraft was eventually scrapped in November 1947.



Junkers Ju 188 A-2 W.Nr. 190327, coded 1H+GT of 9./KG 26

Captured by the RAF at Lübeck, May 1945 this aircraft still in its stadard factory finish of 70/71 on the uppersurfaces with 76 on the undersides. The fuselage and uppersurfaces have been oversprayed with RLM 76 scribble pattern.

The Western Front

March–May 1945

Remagen, Bad Kreuznach, Oppenheim

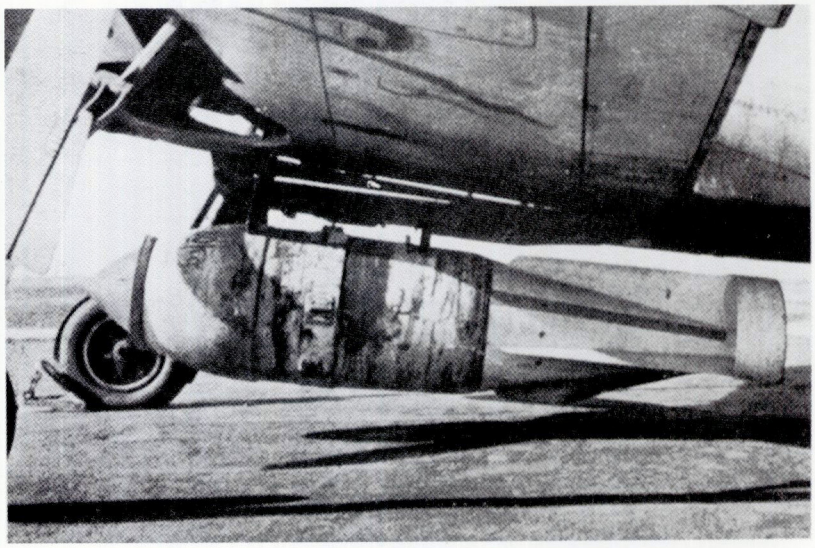
On 7 March, the US 9th Armoured Division seized the intact Ludendorff rail bridge across the Rhine at Remagen, south of Bonn. The *Luftwaffe* first reacted next day, when Ju 87s of NSG 1 and Fw 190s of III./JG 2 bombed the bridghead. The *Kommodore* of KG 76, *Obstlt.* Robert Kowalewski lent his name to the *Gefechtsverband* established to direct the air effort against Remagen. The first *Kampfflieger* to attack the bridge were two Ar 234s of III./KG 76 on the afternoon of the 9th, each with a single 250 kg bomb. They were followed by 11./KG 200, which had detached nine Fw 190 F-8s from Twente to Rhein-Main the day before. The eight Focke-Wulfs on this operation carried SC 500 *Trialen* while on the 10th, seven of them dropped SC 1000s.

The I./KG 51 joined the effort on 12 March, alongside KG 76. The next day, no fewer than 13 Arados and 22 Me 262s in small groups attacked the rail bridge and the pontoon crossings the Americans were building alongside it. By now, KG 76 was using SC 1000s and EGON guidance but the bridge still stood. On the 14th, 6./KG 76 was among the force attacking the pontoons (also bombed by four machines of 11./KG 200) while a pair of III. *Gruppe* aircraft bombed Antwerp Docks. Apparently unbeknownst to the Germans, the Ludendorff bridge collapsed on 17 March but two pontoons still sustained the Americans on the eastern bank. Next day, four Me 262s of II./KG 51, under EGON control, dropped six AB 250s and an AB 500 through cloud from high altitude. An hour later, two Ar 234s delivered an AB 500 each by the same method. That evening, a pair of 11./KG 200 machines, unable to find the bridge, deposited their two SC 500 *Trialen* somewhere on the east bank.

At midday on the 20th, III./KG 76 sent 21 aircraft against marshalling yards in Brussels and that evening, 23 to attack the US Third Army's breakthrough at Bad Kreuznach which had brought them within 15 miles of the Rhine at Bingen and well on the way to the city of Mainz. KG 51 sent in three Me 262s and that night, Fw 190s of 11./KG 200 attacked the same area. Fighter-bomber activity in the area by the *Jagdgruppen* was also intense. On 21 March, KG 76 suffered a crushing setback when the Allies bombed its airfields, destroying one Ar 234 of the *Stab* and badly damaging another; the III. *Gruppe* lost 12 destroyed and 11 damaged and another three of the *Luftflotte* reserve were also wrecked. Eighteen personnel were injured, three were killed or unaccounted for and both Achmer and Hesepe were put out of action. KG 76 did not operate again for over a week and from now on it was rare for daily Ar 234 bombing sorties to reach double figures.

On the 22nd, KG 51 was able to put up 18 jets in two operations to Grünstadt, about 45 miles south of Bad Kreuznach. Then a new emergency flared up, the surprise crossing of the Rhine at Oppenheim during the night of 22/23 March by the US 5th Division. NSG 1 and various fighter units were the first to be sent in before, on the evening of the 25th, II./KG 200 dispatched four *Misteln* to destroy the pontoons: two probable hits were claimed while one Ju 88 lower component crashed after launch and the other composite suffered a direct hit from AA before separation and was lost. A Ju 188 target marker also failed to return.

It seems that 11./KG 200 was pulled out of the line soon after 20 March to reunite with the 9. and 10. *Staffeln*, the III. *Gruppe* returning to action as a unit about two weeks later. Meanwhile, I./KG 66 was still active, losing a Ju 88 S-3 to night fighter attack north west of Oschersleben on the 20th. On the 31st, General Patton's troops crossing the River Main at Hanau were the target of 15 Me 262s of I./KG 51 and others from the II. *Gruppe*.



BELOW: A close-up of an SC 1000 (1000 kg - 2205 lbs) fitted to an Fw 190, which because of its size the lower fin has been cut down in order to give the necessary ground clearance for take-off.

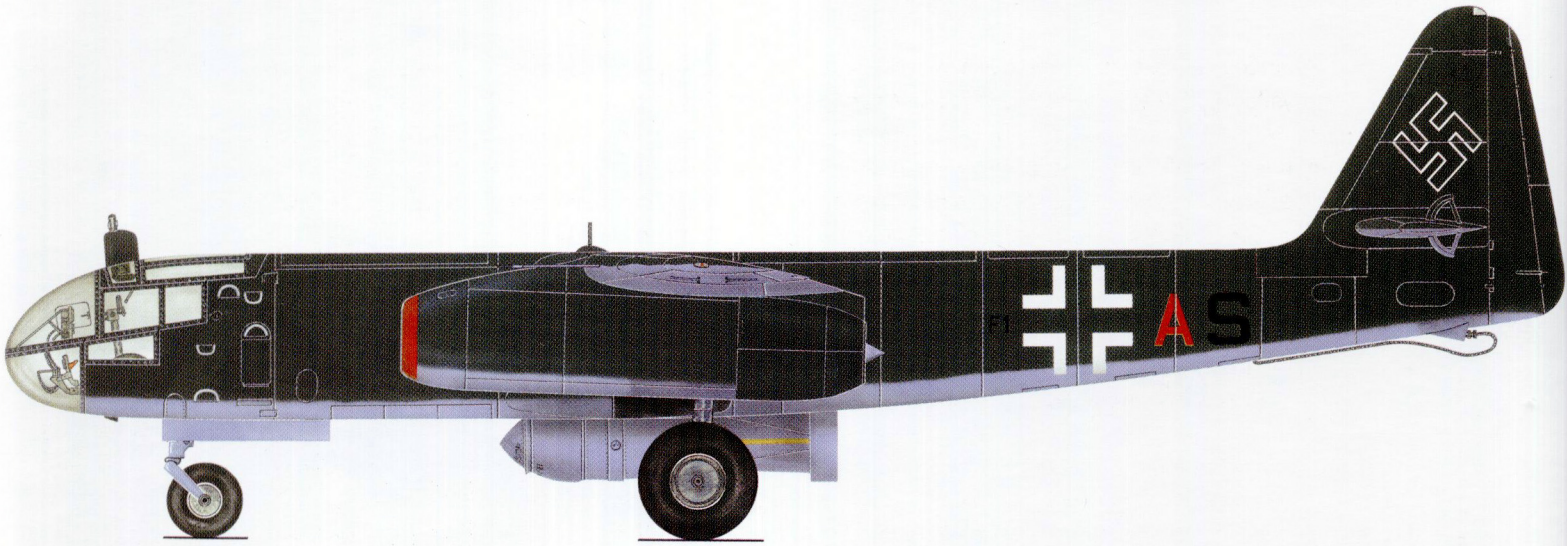
Summer 1943-May 1945

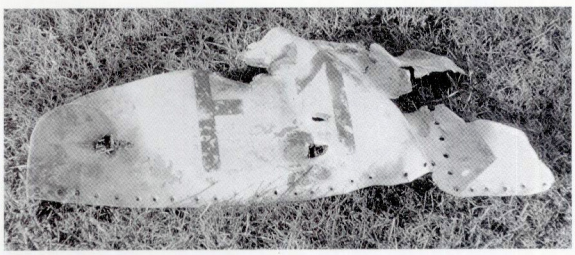
LEFT AND OPPOSITE: This Fw 190 F-8 of 11./KG 200, W.Nr. 583262, has suffered a fire in its engine compartment as well as other damage. It carries the code A3+18, stencilled in black and was found at Rhein-Main where the Staffel had been detached in March 1945 for operations against the American bridgehead at Remagen. Its fuselage crosses are of the 'full' type, rare by 1945, while those underwing and the Hakenkreuz are solid black with a white outline. The 'A3' code of KG 200 seems absent from the port fuselage side while the individual number '18' is repeated in black on the port wheel cover (the starboard cover is not visible).

Focke-Wulf Fw 190 A-8, W.Nr. 583262 of 11./KG 200 found at Rhein-Main, March 1945

This Fw 190 A-8 was found abandoned after an engine fire on Rhein-Main airfield where the Staffel had been detached. It carries the code A3+18, stencilled in black on the fuselage sides. Its fuselage crosses are of the 'full' type, rare by 1945, while those underwing and the Hakenkreuz are solid black with a white outline. The 'A3' code of KG 200 seems absent from the port fuselage side while the individual number '18' is repeated in black on the port wheel cover. The machine is painted in the late war colours greys on the uppersurfaces and 76 on the undersides with grey mottle being applied to the fuselage sides.

Summer 1943-May 1945





ABOVE: On the first sortie against the Remagen bridge on 9 March 1945, Ofw. Friedrich Bruchlos of 8./KG 76, flying Ar 234 B-2, F1+AS was shot down by American anti-aircraft fire that had been hastily assembled to protect the bridge. In 1975 the German aviation historian, Werner Girbig, discovered the crash site and amongst the items recovered was the fuselage side plate in the photograph clearly showing the unit code 'F1' of KG 76.

RIGHT: Ground crew re-fuel an Ar 234 B-2 from KG 76 with J2 fuel in preparation of another mission.

Final jet operations

By the time the Allies had crossed the Rhine, the jet bomber units were at a low ebb. On 6 April, I./KG 51 at Leipheim had 19 (12) Me 262s while II./KG 51 had none. Since 30 March, I. *Gruppe* had blown up four of its machines in Giebelstadt, ferried 24 to JG 7, given up two to IV./EKG 1 and sent four to the workshops at Leipheim. Since 28 March, II./KG 51 had consigned six Messerschmitts to various workshops and ferried 12 over to Zerbst, where 1./NAG 1 was forming on the Me 262. Five of the aircraft sent there had gone missing during the flight. Nevertheless, the *Blitzbomber* were still in business. On 10 April, 14. *Fl.Div.* (covering northern Germany) reported that six Ar 234s had carried out low level attacks in the area Hannover–Oeynhausen–Minden while further south, 16. *Fl.Div.* dispatched no fewer than 23 Me 262 sorties against road movements between Königshofen and Bamberg.

Next day, three Ar 234s attacked motor transport and columns around Bremen, Nienburg and Schwarmstedt plus artillery positions south of Bremen, while nine Me 262s executed low-level bombing and strafing attacks on Allied movements through Reusch Herrenbergheim without loss. The 14th of April saw an Me 262 of KG 51 on a weather reconnaissance to Karlsruhe; others dropped 1.5 tons of bombs on motor transport and five more attacked a fuel dump near Bruchsal with bombs and cannon and bombed transport columns near Pforzheim. On the 15th, Me 262s dropped 3.5 t of bombs on targets between Bamberg and Erlangen. Four days later, seven Ar 234s of III./KG 76 attacked the bridge over the Aller at Rethem and its approaches, losing one of their number. The

Gruppe's last operation was flown by a single Ar 234 against vehicles near Bremerförde on 3 May. Two days later, III./KG 76's seven remaining serviceable machines evacuated to Stavanger in Norway.

At 21.00 GMT on 30 April, IX. *Fl.Kps.* was informed that eight aircraft of I./KG 51 (the *Gruppe's* entire strength) and nine from JV 44 had landed at Prague-Rusin. There they took part in the last desperate defence of their base against the uprising by Czech partisans before the survivors flew out to reach either the pilots' homes or airfields held by the Western Allies.

III./KG 200

On 5 April, British troops had begun bridging the River Weser at Stolzenau, bringing a swift response from 14. *Fl.Div.* which dispatched 155 fighter, 11 Ar 234, 44 Fw 190 and 4 Ju 87 sorties to the area, losing one aircraft destroyed and 13 missing. The next day was summed up by the British 8 Corps as follows:

> *'...what must have been the enemy's greatest and best planned air effort for some time was concentrated on the STOLZENAU bridge, and although no accurate count is available, it is estimated that at least 30 or 40, including Fw. 190s, Ju. 87 and 88s and jet aircraft, were in action during the day. Their object, to destroy the bridge, was unfortunately achieved, since a bomb caused serious damage to it this afternoon.'*

The attack killed and wounded 40 Royal Engineers, wrecked pontoons and cratered the bridge approaches. At 15.05 hrs, eight Fw 190s were seen orbiting at low level after bombing troops and RAF Tempests claimed three destroyed. The 10./KG 200 reported losing three Fw 190 F-8s to AA fire. On 12 April, III./KG 200 had 38 (24) Fw 190s and after dark on the 15th, nine of them attacked motor transport between Celle and Minden, one aircraft going missing. The next night, 21 Fw 190s attacked vehicle concentrations in the Salzwedel-Sprakensehl area, reporting bombs on target but two more aircraft were lost and another was missing. On the 17th, 19 aircraft of the *Gruppe* bombed and shot up vehicle columns between Ülzen, Gifhorn and Celle, losing yet another Focke-Wulf. Assets were now so stretched that orders made no distinction between the tasks of fighter, ground attack and bomber units.

At this period, III./KG 200 was based in Lübeck-Blankensee. The *Kapitän* of 11./KG 200, *Hptm.* Erwin-Peter Diekwisch, ended the war in a Hamburg hospital while his *Gruppenkommandeur, Maj.* Helmut Viedebannt, crashed and was killed on a supply-dropping mission to encircled Berlin on the last night of April. Up to 16.00 hrs on 1 May, 14. *Fl.Div.* had mounted 54 fighter and fighter bomber sorties in 'continuous operations' against pontoon bridges at Artlenburg and Tespe and supply traffic in area Amelinghausen – Artlenburg; again, there had been supply missions to Berlin. By 2 May, III./KG 200 had no more fuel and ended its war at Eggebek.

Ultra decrypt KO 1586

14. Fl.Div. orders for 27th [April 1945], at 17.10 hrs, 26th: KG 76 and JG 26 to prepare for earliest possible take off with all forces against tank and MT columns according situation in areas (a) Prenzlau, Schwedt, Stettin; (b) Linum, Nauen, Berlin, Oranienburg. NSG 1 (North), NSG 20 and III./KG 200 after establishment of operational readiness, and with suitable weather and air situation, to prepare bombing task as for KG 76. Day ground attack Staffel of III./KG 200, take off as early as possible, continuous ops in area as for KG 76.After first operation to land at Lärz. New targets from 14. Fl.Div. Rechlin.

I./KG 66

The erstwhile pathfinders of I./KG 66 had by now been absorbed into the interdiction and harassment effort. On the night of 13/14 April, the *Gruppe* committed seven Ju 88s to an attack on motor transport in the Bremen — Osnabrück area, reporting: 'good nuisance effect, no details could be observed.' A greater effort was mounted two nights later, when 20 Ju 88s and seven Ju 188s attacked the bridge at Rethem: three hits were scored at the cost of four aircraft damaged and another missing. On the 16/17th, 18 machines attacked a pontoon bridge at Sandau and tank concentrations in the Arendsee area without loss while, on the following night, 23 aircraft were sent against the US 83rd Infantry's 'Harry S. Truman Bridge' at Barby on the Elbe, the last big river before Berlin. Thirteen aircraft reported arriving over the target, encountering bad visibility, while nine attacked AA positions. One bomber was missing but on 18/19 April, 26 aircraft of *Gefechtsverband* Helbig bombed the bridgehead without loss. As the ceasefire took effect on 5 May, three Ju 188s and 17 Ju 88s of I./KG 66 were among over 100 *Luftwaffe* aircraft to seek refuge on Norwegian airfields.

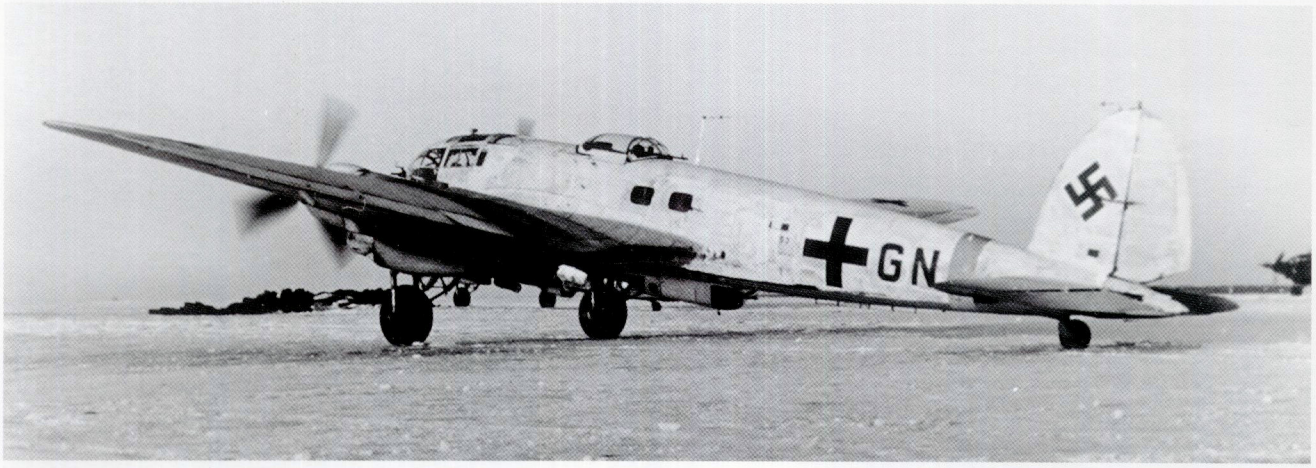
The Eastern Mediterranean

October 1944–April 1945

In October 1944, He 111s of II./KG 4 had helped evacuate German troops from the island of Rhodes to Salonika and then maintained a service between Zagreb, Rhodes and Crete. On 25 March 1945, *Uffz.* Blachat's 5J+HP arrived at Rhodes-Calato and stayed, making as many as five local flights in one night to Crete and Kos, and may have been the He 111 that bombed Palaiokhora, Crete on 29 March. At first light on 9 April, in what was almost certainly the last *Luftwaffe* bomber sortie in the Mediterranean theatre, *Uffz.* Blachat's crew bombed the Allied radar station at Sesci. His missions ended on the 28th when 5J+HP crash landed on Kos. Returning to Crete, the Allies found two Heinkels at Heraklion: W.Nr. 7012, 1G+BN of KG 27 and I./KG 4's W.Nr. 701683, 5J+LK (formerly +MH). Both were camouflaged in 70/71/65 and had apparently been there for some time.

The Eastern Front

November 1944–May 1945



LEFT: This He 111 H-16 belonging to 5./KG 4 'General Wever' is coded 5J+GN, taxies to its take off point. The fuselage has been overpainted in temporary white winter paint but the wing upper surfaces have been left in the standard 70/71 camouflage. The Eastern Front yellow band has also been painted around the rear of the fuselage.

Operation Iron Hammer

In November 1944, the *Luftwaffe* was again contemplating strategic bombing. Studies had been carried out into the possibility of taking down swathes of Soviet arms production by destroying hydroelectric power plants around Moscow and the Volga Basin. Germany had supplied the crucial turbines between the wars and was confident that the Soviets would be unable to build replacements. Now it was hoped that a force of ten He 177s (former II./KG 100 machines languishing at Fassberg) could reach the plants and release drift mines to be carried into their water intakes, the resulting shock waves destroying the turbines. This idea foundered in the face of shortages of fuel and the spares needed to make even ten Heinkels serviceable.

Soon after, a much more ambitious plan, *Unternehmen Eisenhammer* (Iron Hammer), was conceived, based this time around *Misteln* flying from bases in East Prussia. The force was augmented by KG(J) 30 which was diverted from fighter training to the *Mistel*, rejoining the bomber arm without forfeting its *'(Jagd)'* suffix. Its new *Kommodore* was Bernhard Jope, formerly of KG 100. Pathfinder support was to come from Ju 290s drawn from 2./FAG 5 while additional pilots were drafted in from LG 1. Other elements of the force would be the He 111s of III./KG 4 and, as illuminators, Ju 88s and 188s of 5./KG 200 and I./KG 66, all with long-range tanks. The returning *Mistel* pilots were to land their Fw 190s in the German-held Kurland Pocket in the Baltic Republics.

Training and thorough briefings left crews confident their mission could be accomplished; I./KG 66 moved to Tutow in readiness and its aircraft received 'new day camouflage' but *Eisenhammer* was not flown, its postponement being announced on 30 March. This has been attributed both to the loss of the last bases from which the targets could be reached and to more

immediate calls on the *Misteln*. It may never be known whether *Eisenhammer* could have made a difference: at this late stage was there enough materiel already in the Soviets' supply systems to carry them to victory over Germany regardless; would the coming campaign against Japan or the USSR's postwar reconstruction have suffered instead?

Bombers as transports

By early 1945, *Stab*, I. and III./KG 4 were flying supply drops to bypassed troop pockets and 'fortress' cities. In January and February, many of their missions were to Budapest and once that city was lost, attention switched to Breslau, flights continuing until the last days of April. As they had at Stalingrad, the Soviets concentrated guns and fighters against the vulnerable transports on their predictable flight paths. Among the casualties was an He 111 H-20 of II./KG 4, lost to AA fire over the Hungarian capital as it fell to the Red Army on 12 February. The I. *Gruppe* lost two H-16s to fighters on 18 March and 5J+HL crashed after it took off on a supply mission on the night of 11/12 April, killing its pilot, *Lt.* Kemper.

On the night of 27/28 April, flights to Breslau were suspended in favour of getting fuel and ammunition to 9. *Armee*, cut off south east of Berlin but still trying frantically to link up with 12. *Armee* to the west. The dropzone was the intersection of three roads at Kehrigk, aircraft of I. and III./KG 4 delivering their supply canisters soon after midnight. A mission the following night seems to have failed since no ground markers could be found. Nevertheless, despite appalling losses, 9. *Armee* and thousands of the refugees accompanying it did break out during the next three days.

ULTRA decrypts

BT 8195

(A) Report of 13th [March] on operations by 'Trials Detachment' [Versuchskommando] to … KG 200. Six sorties: one hit on a bridge; one He 111 hit by Flak. Comment: no indication of area.
(B) Same day, Schwalb ordered Guntermann to send signals platoon of (fair indications II./KG 40) to Stendal, arriving at latest 22nd, so as to be in time for special undertaking. Comment: Guntermann known to be officer designated 7th by Deputy Kommodore KG 200 as signals officer for operational section to make preparations for LAYTON [i.e. Eisenhammer].
(C) 6./KG 40 at Parchim on 8th.
(D) KG(J) 30 to I./KG 66 Dedelstorf on 18th. Target briefing will begin in Gatow on 18th. Comment: compare [decrypt] BT 7161… for KG 30 Oranienburg, I./KG 66 and II./KG 200 mentioned together in connection with special employment.

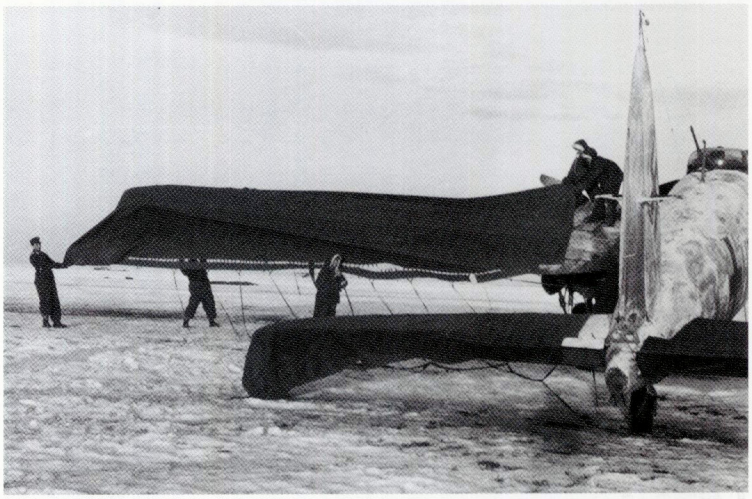
BT 8688

From Kommodore KG 30 very early 27th [March]: (a) to an officer of KG 200 at Stendal and to I./KG 66: special operation against Vistula bridges cancelled. Preparations for LAYTON to continue; (b) an hour later to I./KG 66: Gruppe to transfer that day to advanced landing ground. OKL order.

LEFT: An He 111 H-6 from KG 27 is being made ready being made ready with bombs for delivery to a forward area on the Eastern Front.

Summer 1943-May 1945

LEFT, BELOW AND OPPOSITE: By early 1945 many bomber aircraft were pressed into transports supplying bypassed troop pockets and cities where heavy fighting was still taking place. These aircraft were often simply overpainted with white winter camouflage paint, which obliterated the unit codes. These three photographs of a He 111 H-20 fitted with a towing hitch, is evidence of this practice.



Bases for these supply operations under *Transportfliegerführer Lfl.Kdo. 6*, included Dresden, Novy-Dvor in Belarus and finally Königgrätz (Hradec Králové) in Czechoslovakia. Remnants of other *Kampfgeschwader* were also attached to this command, including two rail interdiction *Staffeln*. The 14. (Eis.)/KG 55 had been inactive since October 1944 but in late January, as the Red Army erupted across Poland, its He 111 H-16s were transferred to Brieg to fly supply drops to XXIV. *Panzer Korps*. Thanks to this support (and the evacuation of casualties by Ju 52s) these troops, joined by the *Grossdeutschland Pz.Kps.*, successfully fought their way 250 km back to German lines. While 14. (Eis.)/KG 27 had been in Pilsen in November, it appears to have been at Novy-Dvor in January and reported a succession of He 111 H-16s lost or damaged during the month. In March, when supply missions were being flown to Glogau, 7./KG 53 reinforced the ad hoc He 111 transport force, *Gruppe Herzog*. Both 7./KG 53 and 14. (Eis)/KG 55 were disbanded early in April, however.

He 111 bomber (supply) units, *Luftflottenkommando* 6 area, 1 April 1945

Unit	Type	Aircraft	Crews
Stab KG 4	He 111	1 (1)	1 (1)
I./KG 4	He 111	24 (21)	50 (43)
8./KG 4	He 111	6 (3)	8 (8)
7./KG 53	He 111	5 (2)	8 (5)

On 22 April, II./KG 4 was drafted in to supplement the effort to reinforce and supply the Berlin garrison, on the point of being cut off by the Soviets. Operations were flown nightly from airfields on the Baltic coast — about all the *Luftwaffe* had left in the north. At first it was possible to land at Gatow and disembark 18–20 Naval Infantry (sailors given rifles but no ground combat training) from each Heinkel. After Gatow was lost, missions continued (sometimes two in a night) with loads of five supply containers but accurate placement was severely hindered by the ever-shrinking German perimeter, Soviet AA and the smoke from the burning city. Despite everything, sorties were flown until the night of 1/2 May, the eve of Berlin's surrender.

Bridges

By early February, the Red Army had gained bridgeheads over the River Oder, the one either side of Küstrin barely 55 km from Berlin at some points. On 1 March, KG 200's *Obstlt.* Baumbach had been given overall command of attempts to destroy the bridges and pontoons held by the Red Army. As well as *Luftwaffe* formations, he could call on *Kriegsmarine* swimming saboteurs and Army artillery. Although on 2 March ten *Misteln* were destroyed by strafing at Alten Grabow, Baumbach got to work immediately, planning an attack on rail bridges over the Vistula which were critical to the Red Army's logistics. This mission did not proceed however.

On 5 March, the air units attacking the bridges were grouped under a new *Gefechtsverband Helbig*, named for LG 1's *Kommodore*, back in action after being wounded in September 1944. Operations would be planned and directed by *Stab* LG 1 and, apart from II./KG 200, Helbig would have available *Versuchskommando* KG 200, the Ju 88s of II./LG 1 at Treuenbrietzen (the I. *Gruppe* remained under 14. *Fl. Div.* in the West) and III./KG 53 to lay mines. The following afternoon, six He 111s from the *Versuchskdo.* attacked the Görlitz bridge with Hs 293s. Two days later, four *Misteln* went for the same target, escorted by III./JG 4. Two Ju 88s and five Ju 188s acted as pathfinders and suppressed AA batteries with anti-personnel bombs. The centre of the bridge was destroyed but it was quickly realised there was insufficient fuel for the repeated operations necessary to prevent repairs.

Summer 1943-May 1945

Gefechtsverband Helbig, 24 March 1945

Unit	Type	Aircraft	
II./LG 1	Ju 88	24	(15)
II./KG 200	Ju 88	18	(8)
	Ju 188	9	(8)
	Mistel 1	14	(7)
	Mistel 2	2	(0)
	Mistel 3	13	(5)
Versuchskdo. KG 200	He 111	19	(11)
	Do 217	8	(4)

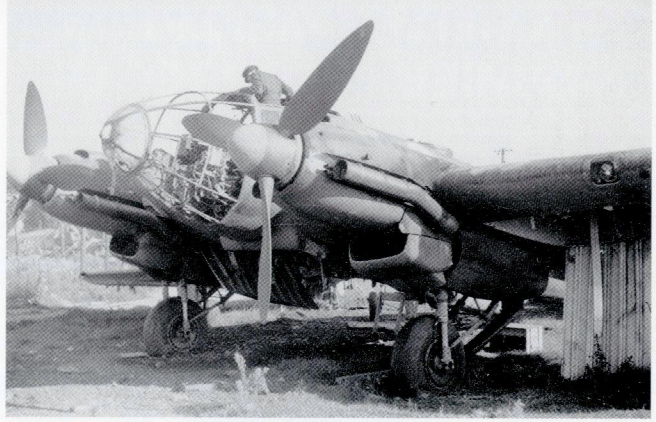
While the *Versuchskommando's* attempt to launch Hs 293s against Görlitz on 25 March was defeated by intense AA fire, II./KG 200 registered a rare success six days later. The objective was Steinau, the strike force consisting of six *Misteln*, four bombers for pathfinding/defence suppression and 24 Bf 109 escorts from JG 52. A hit by one of the composites severely damaged the western end of the railway bridge.

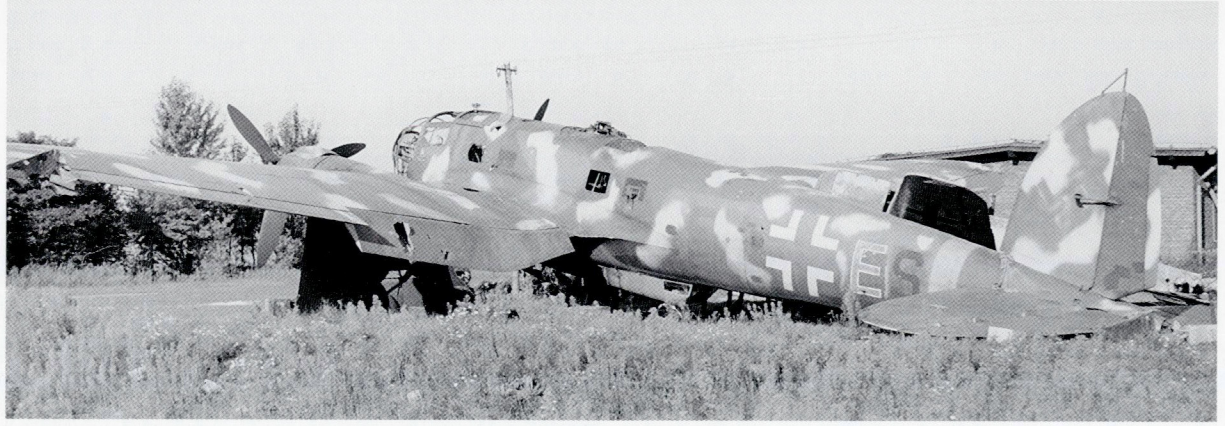
By the last week of March, the Vistula bridges were again being considered as targets and were assigned to KG(J) 30 which was withdrawn from the *Eisenhammer* programme. A big operation was planned for 7 April but American bombing of Parchim helped to ensure that just one *Mistel*, from the I. *Gruppe*, reached its target near Warsaw. On the 10th, *Mistel* bases at Burg, Oranienburg and Rechlin-Lärz were bombed but a lone 6./KG 200 composite attacked Neuhammer on the Neisse. Next day, II./KG 200, with I./KG 66 pathfinding, attacked *Autobahn* bridges over the Rivers Bober and Queiss. On the 12th, *Fw.* Rudi Riedl of 6./KG 200 scored a hit on one of the bridges at Küstrin while, two days later, five escorted *Misteln* apiece were sent against the bridges at Görlitz-South and Schaumburg. The 15th saw I./KG(J) 30 attack Küstrin with JG 11 flying escort. It was 6./KG 200's turn again next day, when *Fw.* Grögel, flying from Peenemünde, hit a bridge there. This success was confirmed by aerial reconnaissance on the 17th, when I./KG(J) 30 again operated against the city's bridges. Attacking the same target on 27 April, *Fw.* Russmeyer of 3./KG(J) 30 claimed a hit on the western abutment of one bridge. The last known *Mistel* operation followed three days afterward when KG(J) 30 tried to attack crossings along the Tantow–Greifenhagen stretch of the Oder.

RIGHT: An unusual photograph taken at Burg in April 1945, shows Oberst Herbert Kuntz unfastening his flying helmet while still sitting in the cockpit of his Fw 190 upper component of a Mistel. The shadow cast in the distance shows clearly how high the combination stood off the ground.

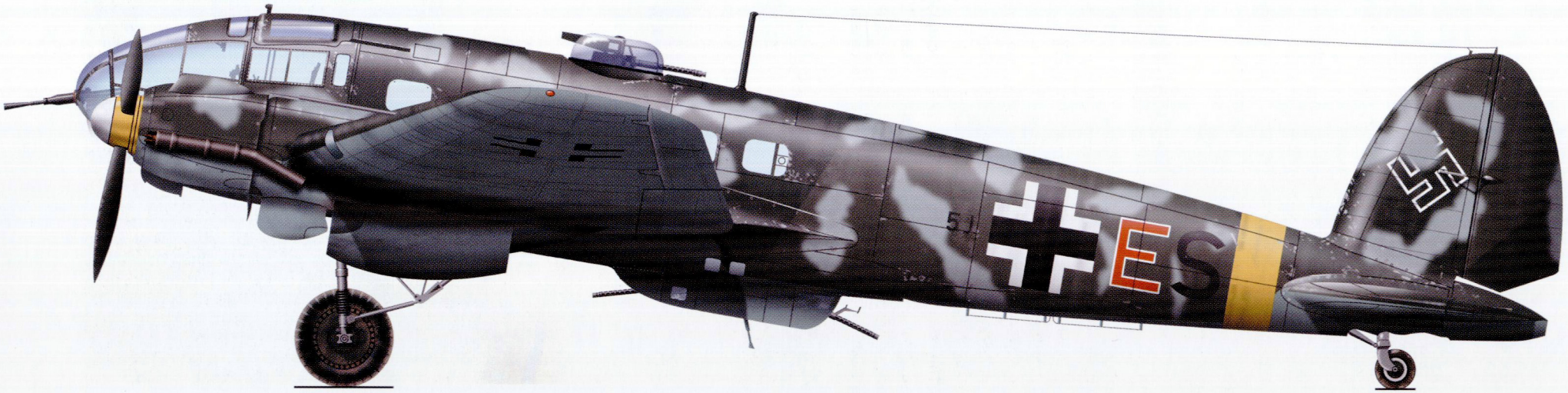
LEFT: Oberst Herbert Kuntz, a Ritterkreuzträger and experienced bomber pilot who had flown with 3./KG 100, was later assigned to II./KG 200 in March 1945 where he underwent training to fly the Mistel. His one and only opportunity to fly the aircraft operationally was frustrated by Allied air operations.

RIGHT: This rare colour photograph of a Mistel 2 shows Oberst Kuntz coming into land at Burg after a training flight in April 1945.





This He 111 H-20 was found wrecked at Berlin-Gatow at the end of the war. It had belonged to 8./KG 4, coded 5J+ES. The 'E' was painted red in the Staffel colour outlined thinly in white. The aircraft appears to carry the standard camouflage pattern painted in RLM 70/71/65 with the top surface having been oversprayed with large patches of RLM 75. The aircraft also has a yellow fuselage band indicating the Eastern Front theatre of operations.



Heinkel He 111 H-20, W.Nr. 7383, of 8./KG 26, Bardufoss, Norway, autumn of 1942
At this time the Gruppe was commanded by Major Werner Klümper who led many operations against Allied Arctic convoys and who was awarded the Ritterkreuz on 29 August 1943. The aircraft was painted in the standard factory finish of 70/71 with 65 underneath and had large blotches of 76 sprayed at random on the the uppersurfaces with the exception of the tailplane. The individual aircraft letter was painted red thinly outlined in white.

Postscript

When the war in the West ended, *Luftflotte Reich* busied itself with the orderly disbandment of its subordinate formations, many of them recently arrived in Denmark and Schleswig-Holstein from the Eastern Front. A list of operational units was submitted to the RAF on 6 May, with gaps in the data explained as 'mainly due to the fact that *Luftflotte Reich* was completely out of touch with many of its formations during the surrender period.'

The *Luftflotte* continued issuing returns and instructions for over two weeks. On 16 May, *Obstlt* Kowalewski was posted to command 'all flying units' (every one of them now grounded) at Eggebek; signals on the 21st named *Maj.* Franz Zauner as *Kommandeur* of III./KG 76 and next day, *Oblt.* Schoppe was listed as CO of III./KG 200.

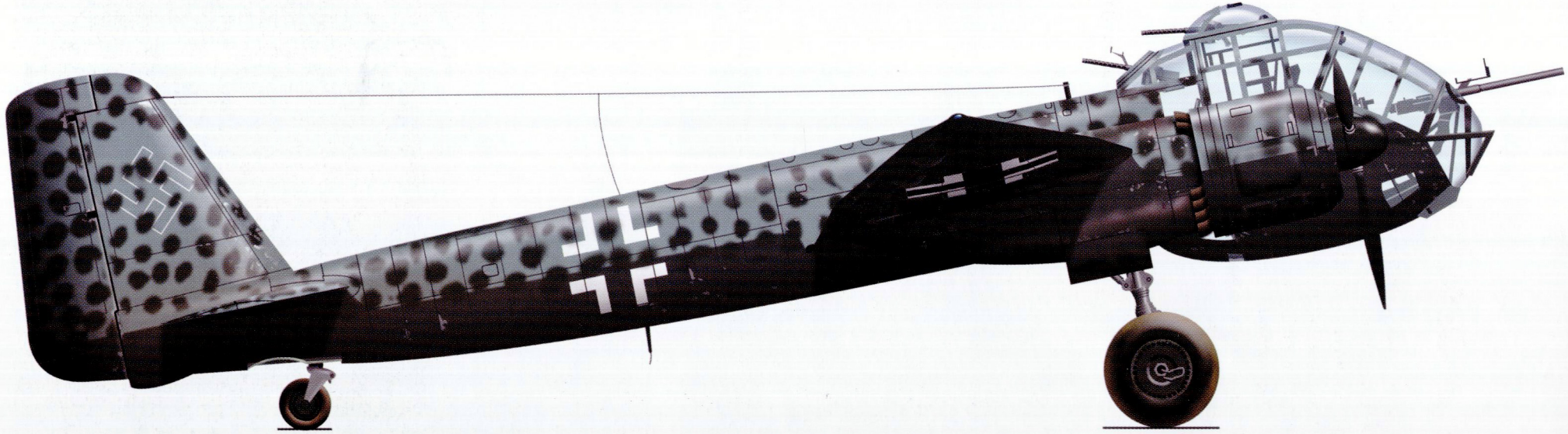
Kampfgruppen of *Luftflotte Reich*, 6 May 1945

Unit	Type	Aircraft	Total personnel	Aircrew	Base
II./KG 4	He 111	17	208	25	Eggebek
Stab KG 76	—	—	72	15	Karstedt
II./KG 76	—	—	423	86	Scheppern
III./KG 76	—	—	467	37	Leck
2./KG 200	—	—	—	—	—
III./KG 200	Fw 190	20	484	63	Eggebek
IV./KG 200	*Mistel*/Fw 190	—	405	—	Burg
Erprobungskdo. KG 200	—	0	—	—	List
Fliegerführer 200	—	—	—	—	Aalborg-West

Note: II./KG 4 was subordinated to *Transportfliegerführer Luftflotte Reich.*

RIGHT: At the end of the war the remnants of the Luftwaffe were left scattered all over Germany. Many aircraft had been either destroyed by retreating German troops or damaged by the Allies in air raids. This view is typical of a 'grave yard' scene with the aircraft having been lined up in rows. It would seem there is very little here that could have been salvaged or flown. An interesting observation are the two Ju 88s nearest the camera which are still in the standard factory finish, in contrast to many of the other aircraft in view which appear to be painted predominantly in RLM 76.

This Ju 188 E typifies one of the more bizarre camouflage schemes adopted by the Luftwaffe during the late war period. This aircraft, possibly belonging to KG 66, was reputedly found in Denmark by the RAF. Abandoned near a hangar, which was disguised as a house, this aircraft wears camouflage far removed from the old 70/71/65 scheme. The airframe was finished overall in RLM 76 heavily spotted with a colour close in tonal value to that of the 70 of the propeller blades, probably 81. The Hakenkreuz and Balkenkreuz markings are the prescribed white outline type with the former almost lost below the camouflage. Even the Werknummer at the tip of the fin had been oversprayed with the dark mottle. The lower surfaces are painted in temporary black.



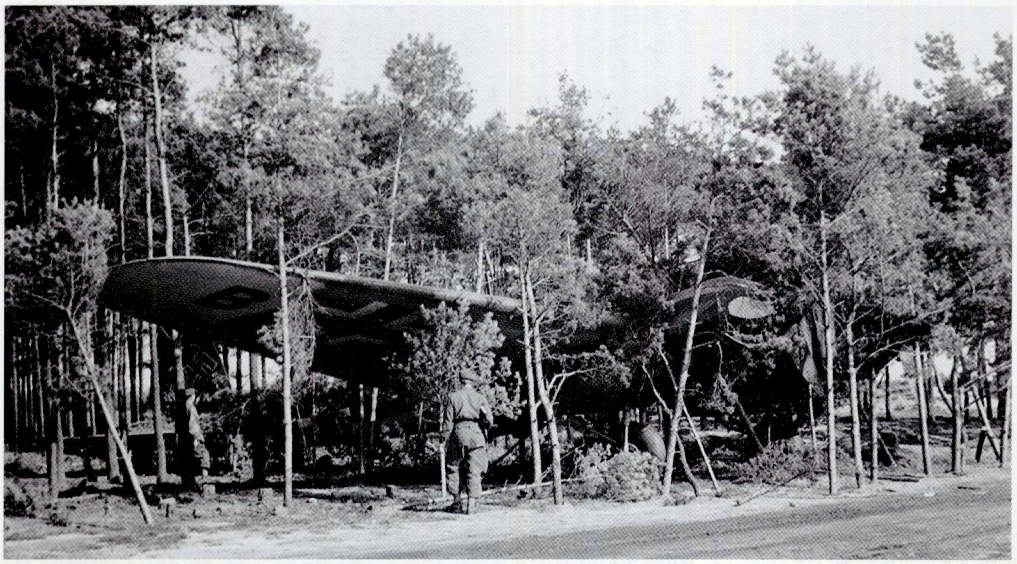
Junkers Ju 188 E possibly from KG 66, found in Denmark 1945

Abandoned by its hangar, which was disguised as a house, this Ju 188 wears camouflage far removed from the old 70/71/65 scheme. The airframe was finished overall in 76-colouring, heavily spotted with a colour close in tonal value to that of the 70 of the propeller blades, probably 81. The Hakenkreuz and Balkenkreuz markings are the prescribed white outline type with the former almost lost below the camouflage. Even the Werknummer at the tip of the fin had been oversprayed with the dark mottle. The lower surfaces are painted in temporary black.

Summer 1943-May 1945

LEFT: This Ju 188 A-2 from 2./KG 6, coded 3E+HK, was found at Brussels-Melsbroek in Belgium. The machine appears to be a hybrid, having at some time had its port wing replaced. The camouflage is typical of the late war schemes in being painted almost without any regard to standard finishes. The overall uppersurface finish appears to be RLM 76, which has been broadly oversprayed with either RLM 70 black-green or black.

ABOVE: This Fw 200 C-4 previously belonged to 7./KG 40 and was coded F8+FR, and was found abandoned in Norway. The aircraft carried the standard uppersurface colour of 72/73 over which white winter paint had been roughly applied and through time has started to dissolve away due to weathering.



ABOVE: Many Luftwaffe crews with their aircraft at the end of the war, all tried to find a safe haven in Sweden. This photograph was taken at Bardufoss airfield and shows a mixture of Ju 88s, Ju 188s and He 111s, which all appear in excellent condition. The only thing that appears to been removed is the armament. As none of the aircraft carry the yellow Eastern Front theatre band it would appear that many of these aircraft made their way to Sweden from central Germany. The camouflage and markings of aircraft surrendered in Sweden were varied, some having standard factory schemes while others had been oversprayed in a wave pattern with RLM 76.

ABOVE: A British soldier inspects a well camouflaged He 111 hidden amongst the trees somewhere in Northern Germany. The countryside was littered with aircraft hidden in this way although most never flew again.

CORRIGENDUM

Kampfflieger Volume Three
Please note the caption for the photograph at the top of page 220 should read:

'Armourers load an SC 1000 bomb on to the external bomb carrier of a Junkers Ju 188 of KG 6.'